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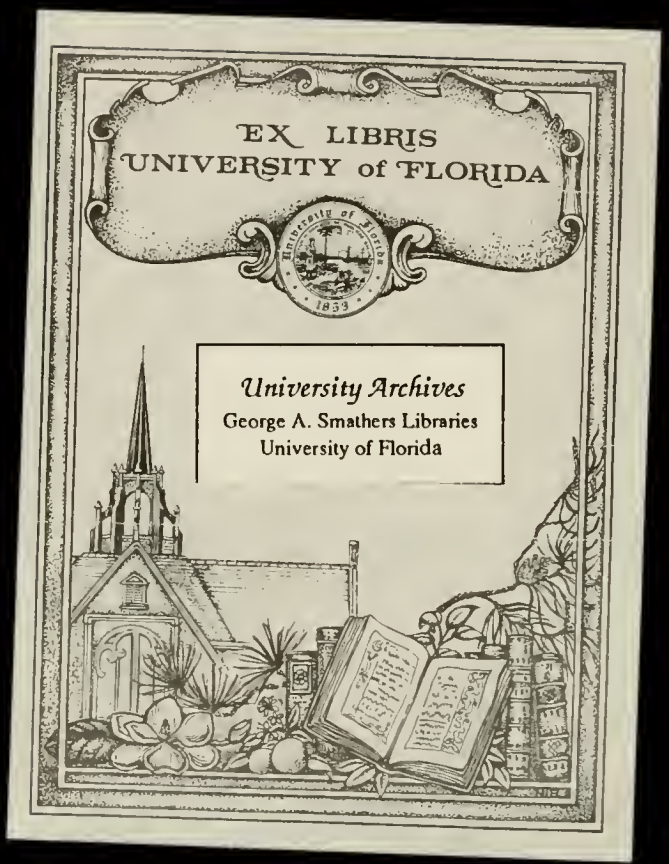

THE RECORD COMPRISES:

The Graduate Catalog, the Undergraduate Catalog, the Catalogs of the Colleges of Law and Medicine, and various bulletins on regulations, policies, and information. These documents are sent gratuitously to all persons who apply for them. The applicant should state specifically which documents or information is desired.

Address: The Registrar, University of Florida, Gainesville, Florida 32601

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Catalog Planning: Deborah Furr Ingram, Wendy Waddell, and David Beard

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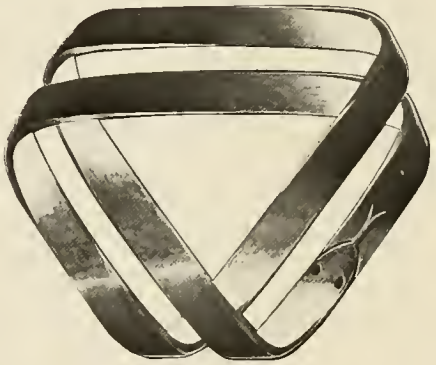
1972-1973

THE UNIVERSITY RECORD
J. HILLIS MILLER HEALTH CENTER
UNIVERSITY OF FLORIDA, GAINESVILLE



COLLEGE OF MEDICINE CATALOG

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ACADEMIC CALENDAR 1972-1973

ALL CLASSES

Registration	Tuesday, September 19, 1972
Homecoming	Friday Noon, November 17, 1972 Saturday, November 18, 1972
Thanksgiving	Wednesday, 6:30 p.m., November 22 to Monday, November 27, 1972

FIRST YEAR (Class of 1976)

Phase A

1st Quarter

Orientation	Friday and Saturday, September 15-16, 1972
Classes Begin	Monday, September 18, 1972
Quarter Ends	Friday, December 15, 1972

2nd Quarter

Classes Begin	Wednesday, January 3, 1973
Quarter Ends	Friday, March 16, 1973

3rd Quarter

Classes Begin	Monday, March 26, 1973
Quarter Ends	Friday, June 8, 1973

SECOND YEAR (Class of 1975)

Phase B

Classes Begin	Monday, August 28, 1972
Clinical Rotations	Sunday, November 26, 1972

THIRD YEAR (Class of 1974)

Phase B (continued)

Clinical Rotations End	Saturday, November 18, 1972
Pharmacology Course	Monday, November 20 to December 16, 1972

Phase C

Classes Begin	Wednesday, January 3, 1973

FOURTH YEAR (Class of 1973)

Phase C (continued)

Classes End	Friday, June 8, 1973
Commencement	Sunday, June 10, 1973

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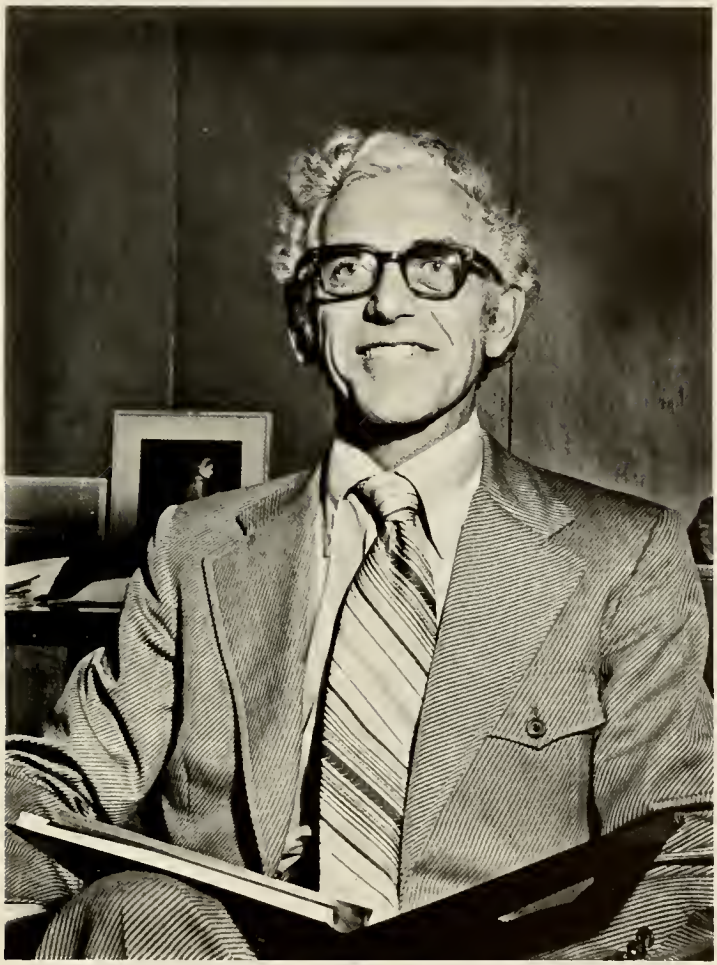

This volume is dedicated to Dean Emanuel Suter by his students and colleagues with affection and respect. His leadership has exemplified the precious attributes of academic strength and scholarship applied to administration. He has given us a quiet and effective revolution in curricular and collegiate organization. He will be remembered for these, as for his warmth and personal insight, humor and patience.

GENERAL CONSIDERATIONS

The College of Medicine, a component college of the J. Hillis Miller Health Center of the University of Florida, opened its doors to medical students in September, 1956. The various programs rapidly expanded to include a curriculum leading to the M.D. degree, a Ph.D. program in the basic medical sciences, internships and residency programs in the various specialties and subspecialties of medicine, and numerous special fellowship programs of clinical or scientific orientation.

The College of Medicine aspires to serve as an academic center of scientific and educational leadership in medicine and allied health fields, and highly specialized medical care services to patients referred by practicing physicians. The faculty is dedicated to programs of research, education, and patient care, while providing the student educational experiences of the highest quality. Located in north central Florida, the College of Medicine is engaged in extramural programs involving neighboring communities as well as a network of educational services in Daytona Beach, Jacksonville, Tallahassee, Pensacola, and other Florida cities.

Situated at the southeast corner of the 2000-acre campus of the University of Florida, the College of Medicine enjoys the benefit of strong ties with other programs within the University. The relationships to engineering, biological sciences, social sciences, education, psychology, and other disciplines are of particular importance.

FACILITIES

Most programs and faculty are housed in the J. Hillis Miller Health Center. The Health Center's facilities include the Medical Sciences Building, the Library, the Colleges of Health Related Professions, Nursing, and Pharmacy, and the Shands Teaching Hospital and Clinics which has a capacity of 405 beds.

The Clinics are visited by over 100,000 patients a year. Additional clinical and research sources are provided by the Veterans Administration Hospital, which is across the street from the Health Center and has a capacity of 450 beds. Both institutions offer ample opportunity for hospital-based bedside and ambulatory teaching. Formal educational affiliations have been established in Tallahassee and Jacksonville as well, thus providing additional basic science and clinical science resources.

The construction program is actively underway in Gainesville and will double the facilities of the Health Center. A major feature will be the *Communicore,* a learning center for the medical and dental students. It will house lecture and seminar rooms, multidisciplinary teaching laboratories, study areas, library facilities, and a center for development and utilization of audiovisual and automated learning aids. While each student presently is assigned a study cubicle, it is expected that after construction of the *Communicore,* the students will have far greater resources for individual study and development.

PROGRAM IN MEDICAL SCIENCES (PIMS)

In response to the need for more physicians in our evolving health care delivery system, Florida State (FSU) and Florida A & M (FAMU) Universities have developed an innovative, inter-institutional plan for medical education which integrates the first year of the medical school curriculum with the undergraduate degree programs of FSU and FAMU. Students receiving *secured status* from the FSU-FAMU Program in Medical Sciences are guaranteed entry into the clinical phase of the medical curriculum. (For a more detailed description of the Program in Medical Sciences, please check the gold section of the Catalog.)

JACKSONVILLE HOSPITALS EDUCATIONAL PROGRAM (JHEP)

The Jacksonville Hospitals Educational Program (JHEP) of Jacksonville combines the resources of eight participating Jacksonville hospitals in an educational program with the University of Florida spanning from undergraduate to graduate and continuing medical education. (The JHEP program is described in the green portion of the Catalog.)

EDUCATIONAL CONCERNS

The educational concerns of the College of Medicine begin with preprofessional counseling, and include the program leading to the M.D. degree, the internship, residency, and continuing medical education for the practicing physician. Each phase of this educational continuum has particular emphasis and significance. Educational offerings for the student of medicine must draw on the humanities, natural and biological sciences, and on technology to provide a well-balanced educational experience. The graduates of the program must have an appreciation both for the breadth of the arts and skills of medicine and the highly specialized and fundamental nature of scientific medicine. The graduates of the M.D. degree program must have sufficient experience to be able to choose from the many career opportunities in medicine. Also, they must have acquired an attitude of

continuing self-education and must have learned to adhere to the highest scientific and ethical standards of the medical profession.

The College of Medicine and its programs received full national accreditation first in 1960 and again in 1970 by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association. The residency programs are accredited individually by the respective Specialty Boards.

STUDENTS

The College aspires to attract into the various programs students of the highest caliber. High standards of scholastic achievement, moral character, and motivation are demanded of the student. The highly personal relationship between patient and physician places the latter in a position of trust, which demands maturity, integrity, intellectual honesty, and a sense of responsibility. Because of the vast area of science which must be mastered by the physician, the student of medicine must possess a high basic aptitude supplemented by academic preparation of the highest order. Through an active recruitment program, a broader representation of the ethnic mixture of the state is sought in the student body. The College adheres strictly to the principle of ethnic, racial, religious, sex and social equality among its student body and faculty.

FACULTY

The student is accepted into a fellowship of learning that should mark the beginning of an educational and personal relationship of long duration. To meet the requirements of modern medical education, the faculty must be representative of a wide area of academic experience. In addition to the demand for highest competence in a chosen field of specialization, the faculty must be interested in education and in students. It must attempt to develop and maintain close faculty-student relationships through personal, professional, and social contacts. The nature of investigative and clinical training demands close interaction between faculty, students, and the problem at hand, be it the patient or the object of scientific study.

RESEARCH

Individual and cooperative investigations constitute an important aspect of the activities of faculty and students. Facilities and equipment are made available through state, private, and federal funds. In addition to the research laboratories

and animal facilities in the J. Hillis Miller Health Center and the Veterans Administration Hospital, there are animal research facilities at the Health Center Animal Research Farm.

Research projects of the faculty of the College of Medicine range from problems of molecular and cellular biology to all phases of basic and applied clinical investigations including behavioral sciences, epidemiology, and many other disciplines. Collaborative projects are in process with veterinary science, engineering, biology, nuclear sciences, psychology, sociology, education, and many other disciplines.

In view of the nature of modern biomedical investigation, it is natural that many interdepartmental efforts have evolved. Most of these involve faculties from the basic and clinical sciences, and frequently from other colleges in the University. In general, these groups are organized along categorical lines such as the Center for Neurobiological Sciences, the Cardiovascular Group, the Divisions of Infectious Diseases, Metabolism and Endocrinology, and Gastroenterology, to mention a few. These groups serve a specific research need for the faculty and comprise very strong educational units in the new curriculum. The Clinical Research Center in the Shands Teaching Hospital and Clinics is a focus for clinical investigation. Very active collaboration in both research and education is developing between faculties of the College of Medicine and the College of Engineering. Educational opportunities in biomedical engineering are available at all levels: pre-bachelor, graduate, and postgraduate.

ACADEMIC CONSIDERATIONS

Medicine as a profession deeply rooted in the culture of the society it serves must be responsive to social needs and demands. Deficiencies in the medical system developed slowly in recent decades and assumed critical proportions in the last few years. Both the consumer and the provider of medical care now are expecting major changes in the practice of medicine and its capacity to serve all elements of our population. Medical education, although somewhat isolated from the day-to-day problem of medical care, has been drawn into the mainstream of crisis and change. In response to this challenge, the faculty of the College of Medicine has been deeply concerned with the adaptation of the educational programs to the needs of today and tomorrow.

THE CONTINUUM OF MEDICAL EDUCATION

The curriculum of the College of Medicine has several basic objectives. First, it is designed to instill in the medical student early in his first year the attitude of a physician. By presenting the student with a clinical problem and sufficient basic science data to understand the organic malfunction, it is hoped the learning process will assume a meaningful significance for him. Second, the curriculum is designed to acquaint the student with the different facets of medicine in such a fashion as to permit him to make an early choice from the many career offerings in medicine. Third, the study plan permits the student to assume the responsibility for developing an educational program relevant to his particular needs — a program which will permit him to derive maximum benefit from the learning process.

The present medical curriculum is the product of a trend over the last 50 years in which the medical school and its mother university have established close academic ties. This trend has had a great impact on the quality and character of medical education. It has facilitated the emergence of scientific medicine and increased sophistication of patient care (including preventive medicine). The price paid for these advances has been a rising cost of medical education and medical care, as well as an alienation of medical schools and their faculties from organized medicine and the practitioner. As our society approaches an important juncture in the development of health and medical care systems, the conflict between education and practice is becoming the cause of increasing concern for involved parties. Medical school faculties now are studying carefully the long-range aspects of their educational endeavors, as well as their position as proponents or intermediaries between opposite points of view. As a result of this review process, significant proposals for far-reaching change are being made, which will have a long-lasting impact on medical education and medical schools.

At the University of Florida, three major components of a new program were initiated with the entering class of medical students in September, 1969. They are: flexibility of programs, the art and the science of medicine, and comprehensive and community-oriented medicine.

FLEXIBILITY OF PROGRAMS

For many years, medical faculties attempted to adhere to a principle of completeness in spite of the increased volume of knowledge in the basic medical and clinical sciences. They added new courses and condensed old ones until the deluge of factual material over-extended the student's capacity for retention, as well as his facility for mental integration. In addition, the assumption was made that a single standard program of instruction would be adequate for all students accepted into the medical program. Experience at the University of Florida has since prompted consideration of the varying backgrounds of medical students and an elastic curriculum which will be relevant to the individual's needs and will permit incorporation of further developments in medical education. Consequently, the new program at the University of Florida differs from the previous curriculum in the following ways:

1.) The basic or core program no longer is designed to transmit the total knowledge presumed necessary for the practice of medicine. The emphasis has changed from presentation of content to the transmission of an educational process, whereby the student largely is required to seek out for himself the necessary content. Admittedly, the student will have wide gaps in his knowledge of basic sciences and the practice of medicine, but he should have sufficient information to make a rational and well-informed decision regarding his further education.

2.) Although students in a medical school all share the desire to become physicians, their backgrounds and specific goals vary greatly. By permitting greater individualization the new curriculum will enable the student to adapt his personal program to his previous educational experience, his individual learning speed, and to his career plans for the future. In providing for this flexibility, the medical curriculum will become an educational continuum beginning with preprofessional education and culminating with continuing medical education for the practicing physician.

3.) The new medical program will endeavor to free the student from the classroom and provide him with the opportunity to pursue his studies in the library or laboratory. While the regular course load for the first year of the medical student previously consisted of 34 to 36 hours per week, it has been reduced to 25 hours in the new program. The student with more time to devote to individual studies will require greater support also — through guidance, counseling, teaching aids such as computer assisted instruction, and others.

4.) It is anticipated that the length of study in the medical program can be adapted naturally to the needs of the individual student. In some instances first year courses may be used to fulfill undergraduate degree requirements. In others, a student may embark on an early residency program or pursue a combined M.D.-Ph.D. degree program. The prime emphasis of the new curriculum will be on providing a program which has the elasticity to encompass individual needs and interests.

THE ART AND SCIENCE OF MEDICINE

The scientific basis of medicine universally is accepted as a prerequisite for medical practice — at least on an intellectual level. Too often, however, we are confronted with the idea that the practice of medicine is an art rather than a science; and furthermore, that too much science in medical education renders the future physician insensitive to the human needs of his patients. Frequently medical students complain that entrance into medical school really does not bring about the expected change in fulfillment of their motivational desires. Often they feel removed from the art of medicine to the point where they cannot experience satisfaction or gratification of their emotional needs. As a result, a cynical attitude may emerge toward medical and patient problems, with a subsequent loss of motivation toward learning. The educational experience must help the student to achieve a high quality blend of humanism and science, which will enable him to render optimal medical care to his patients. The faculty hopes some of the new programs will provide a blending of the art and the science of medicine.

Through careful planning an effort will be made to use the fundamental knowledge of the basic sciences in a meaningful relation to career goals in medicine. While during Phase A (first year) the emphasis will be on sciences, it will focus on clinical medicine during Phase B (second year and first half of the third year). The opportunity to advance in both fields in a correlated fashion then will be offered in Phase C. It is hoped this program will contribute toward a resolution of the ambivalence between science and the practice of medicine.

The effect will be enhanced by an earlier beginning of clinical rotations by the student (second quarter of the second year), thus eliminating prolonged frustration.

These two features are of special significance for modern medicine, since there is widespread recognition that delay between scientific discovery and its clinical application is too long and must be shortened. We expect the graduates of our new program to have less difficulty in retaining a true feeling for a close relationship between science and practice.

COMPREHENSIVE AND COMMUNITY-ORIENTED MEDICINE

The development of the University's teaching hospital has played an important part in accelerating the emergence of scientific medicine by providing ideal conditions for certain aspects of clinical teaching. However, the student in the teaching hospital is confronted with highly selected types of patient problems, which in the outside world are exceptions rather than the rule. He gains little insight into the day-to-day problems of minor and major illnesses as they occur in the community. For this reason programs have been initiated in which the student will work in community-oriented service facilities experiencing different kinds of health care problems. Thus the student will have a more balanced view of the practice of medicine and will be able to make his career choice accordingly.

PREPROFESSIONAL EDUCATION

In the continuum of the education and training of a physician, the undergraduate college years are uniquely important. The role of the physician in his community, as well as the quality of the health care he delivers, will reflect the breadth of his liberal education as much as it does the depth of his professional education. It is difficult to overstate the importance to the future physician of a strong background in the social-cultural areas of study as increasing recognition is paid to the environmental and behavioral aspects of disease and the continuity of health care within the community.

This does not imply that the student's knowledge of physical and biological sciences is of less importance; on the contrary, the scientific basis of our understanding of disease processes is rapidly expanding. Rather, it emphasizes the desirability of a carefully selected program in liberal education with a strong core of understanding of the principles of physical and biological science.

The preprofessional student's educational program, as well as his selection of activities, should lead to the development of intellectual maturity and judgment, efficient study habits, and effective powers of reasoning. These goals of personal development, added to the importance of basic knowledge obtained in the social, cultural, and natural science areas of study, emphasize the significance of the liberal arts for the education of a physician.

THE APPLICANT POOL

Generally, students applying for admission should plan to complete the requirements for a bachelor's degree. However, a limited number of well qualified students may be accepted without fulfilling the degree requirements, provided they show evidence of sufficient preparation for the study of medicine.

Personal qualities of a high order, a genuine concern for human welfare, and superior intellectual achievement are the primary requirements for admission. Such intellectual achievement is indicated in part by performance in undergraduate courses. Applicants with an overall "B" average as a minimum will receive strongest consideration for admission to the College of Medicine.

The College of Medicine admits both men and women to its entering classes; members of minority groups are strongly encouraged to apply. A limited number of out-of-state students, in proportion to the number in the University as a whole, may be admitted. Applicants over the age of thirty rarely will be given strong consideration.

Applications from students presently enrolled in another medical school will be considered provided (1) the student is eligible to continue in his present medical school, and (2) the school he is now attending is accredited by the Association of American Medical Colleges.

Special programs of study leading to graduate degrees in the basic medical sciences and admission requirements for these programs are outlined on page 30 of this Catalog.

BASIC SCIENCE REQUIREMENTS

The minimum science admission requirements include basic introductory courses and laboratories in the following subjects:

Biology — 8 semester hours (12 quarter hours)
General (Inorganic) Chemistry — 8 semester hours (12 quarter hours)
Organic Chemistry — 8 semester hours (12 quarter hours)
Physics — 8 semester hours (12 quarter hours)

Although additional science courses beyond the minimum will not enhance the chances for an applicant's acceptance, many students desire an additional background in science. For this purpose courses in physiology, biochemistry, embryology, physical chemistry, microbiology and genetics should be considered. It is not necessary to choose one of the sciences as a college major.

No specific requirement is set in the area of mathematics, since at most colleges some mathematics is prerequisite to physics and chemistry. In general, some college level work in calculus is strongly recommended. Familiarity with the principles of statistics and their application to the analysis of data is an important asset for any medical student. A knowledge of computers and computer programming would be valuable for the application of these tools in medical education and in all forms of the delivery of health care.

Consideration should be given by the student to participation in honors courses, independent study and scientific research. These activities present opportunities for unstructured learning experiences and explorations of certain areas in considerable depth.

Electives: The remainder of the college work should be distributed throughout the humanities and social, biological, and behavioral sciences. The student should select subjects which stimulate him intellectually, challenge him to a maximum performance and contribute to his overall development and maturation. The courses may aim toward a thorough study of a single area with a general background in many areas, or may group in several related areas in the sciences or humanities.

The discriminate selection by the student of elective courses will not only increase his store of knowledge, but will help him form attitudes basic to a professional career in medicine. Development of certain skills will place the student at ease in a professional school.

Extracurricular Activities: Extracurricular activities and employment both during the academic year and the summers can make important contributions to an individual's development. Experience in medical and paramedical areas often contributes toward an understanding of health care delivery problems and helps to solidify the basis of the student's motivation toward a career in medicine.

Discipline in study is essential. Efficient skill in accurate, rapid, interpretive reading should be mastered. Methods of observation and collection of data, evaluation deduction, and interpretation of findings are taught in psychology, physics, and other sciences. The analysis and organization of a set of observations into its simple components and the synthesis of many fragments of data into a working hypothesis on which a plan of action can be based are taught in many courses. The student should keep these objectives in mind throughout his preprofessional training.

A high degree of skill in the use of spoken and written language should be developed accurately to extract a story, systematically to record facts for the use of others, and precisely to transmit instructions. These techniques are taught in courses in English literature and composition. The study of foreign languages also illustrates the exact meaning of words and the use of subtle differences in shading. Communication through symbols is taught in chemistry, physics, and mathematics. Proficiency in typing increases the speed and accuracy of communication and will aid the student in his professional work.

Medicine deals with individuals who react to their physical, social, and cultural environment. Functional derangement induced by the interplay of emotional factors in the individual or by external influences from the environment can be detected by subtle methods. The study of emotional factors is taught in philosophy,

religion, psychology, and the fine arts, while the study of social forces is considered in history, literature, economics, sociology, and law. Since all of these factors may induce reactions during physical illness which exceed that produced by the disease itself, the study of principles in these areas is most important to the education of a physician.

MEDICAL COLLEGE ADMISSION TEST

Every applicant must take the Medical College Admission Test, preferably in the spring preceding the submission of his application. The test is given twice yearly in many colleges and universities. For further information about the test, write to The Psychology Corporation, 304 East 45th Street, New York, New York 10017.

APPLICATION AND ACCEPTANCE PROCEDURES

Admission to the College of Medicine is highly competitive and the applicant is appraised on the basis of information gained from previous academic records, scores on the Medical College Admission Test, recommendations by premedical advisors and teachers, and personal interviews. The College of Medicine endeavors to select those students who appear by present standards the most qualified for a career in medicine. Similarly, the student is expected to make a careful choice of that institution which offers an environment and program most suited to his interests and personality. A personal visit to the school of his choice should be most helpful.

1.) The College of Medicine is a participating institution in the American Medical College Application Service (AMCAS). The AMCAS application form may be obtained after June 1 from any of the participating institutions or from the Office of the Registrar, University of Florida, Gainesville, Florida 32601.

2.) After careful screening of the initial applications by the Medical Selection Committee, promising applicants will be sent an additional formal application requesting information not included on the AMCAS application. The completed form should be returned directly to the University of Florida and arrangements made for submission of a preprofessional committee evaluation or letters of recommendation. This second phase requires an application fee of $15 from all students not previously enrolled in the University of Florida. This fee is not refundable. All materials should be submitted as early as possible, but no later than December 1 of each year.

3.) Following committee review of all of the application materials, interviews with members of the Medical Selection Committee will be arranged for competitive applicants. These interviews are usually held on Saturdays at the University of Florida College of Medicine campus in Gainesville.

4.) After receipt of an acceptance, a written reply to the College of Medicine is expected within two weeks. There is wide variety in acceptance dates of different medical schools and therefore some students may wish to reconsider after filing a declaration of intent. This is a perfectly acceptable procedure, provided the student promptly sends written notification to every school holding a place for him.

5.) No deposit is required from accepted applicants, but if they accept the offer of a place they have an obligation to matriculate unless they are released by the school. Such release is granted automatically upon request by the student.

The above procedures are approved by the Association of American Medical Colleges.

PROFESSIONAL EDUCATION LEADING TO THE M.D. DEGREE

Once a decision has been reached by both the medical school and the applicant, the student enters the professional portion of the educational continuum. From this point on, the student will pursue his educational endeavors from the vantage point of a physician striving to achieve well-rounded capacities as a physician-humanist and scientist in his profession and community.

PHASE A

Phase A will occupy the entire first year, followed by vacation in the summer quarter. Teaching will be of an interdisciplinary, interdepartmental nature, with teaching teams drawn from both the basic and clinical departments. The course schedule may be broken down in the following manner.

The Introduction to Medical Sciences consists of discussions of metabolism and the control of metabolism in man. Presentations have a clinical orientation and are followed by in-depth coverage of biochemical mechanisms. The course will cover such topics as nutrition, body composition, intermediary metabolism, and bioenergetics.

Cell Biology will emphasize cellular functions in health and disease, the structure and molecular biology of the mammalian cell, cell-cell interactions, and reactions to microbes and to viruses. The course work will consist of lectures, discussions, and tutorial sessions.

Human Systems I concerns the functions of differentiated tissue types. Beginning with an introduction to the tissues of the human body, the course will include a detailed study of the neurobehavioral, musculoskeletal, respiratory, and cardiovascular systems. In order to provide the student with a reasonable idea of

structure and vocabulary, each system will begin with a study of gross and microscopic anatomy. This will be followed by physiological or functional aspects of the system, and will conclude with the effects of specific chemical agents upon the system. Representative pathologic phenomena also will be considered.

YEAR I

<table>
<tr><th colspan="2">FIRST QUARTER</th><th>SECOND QUARTER</th><th>THIRD QUARTER</th></tr>
<tr><td rowspan="2">INTRO. TO MED SCI
(MED 539)</td><td>CELL BIOLOGY
(MED 540)
(MED 541)</td><td>HUMAN SYS. I
(MED 545)
Neurobehavioral
Musculoskeletal
Respiratory
Cardiovascular</td><td>HUMAN SYS. II
(MED 546)
Gastrointestinal
Hematologic
Renal
Endocrine
Reproductive</td></tr>
<tr><td colspan="3">INTRODUCTION TO HUMAN BEHAVIOR
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<tr><td colspan="2">TUTORIAL
(MED 547)</td><td>TUTORIAL
(MED 548)</td><td>TUTORIAL
(MED 549)</td></tr>
</table>

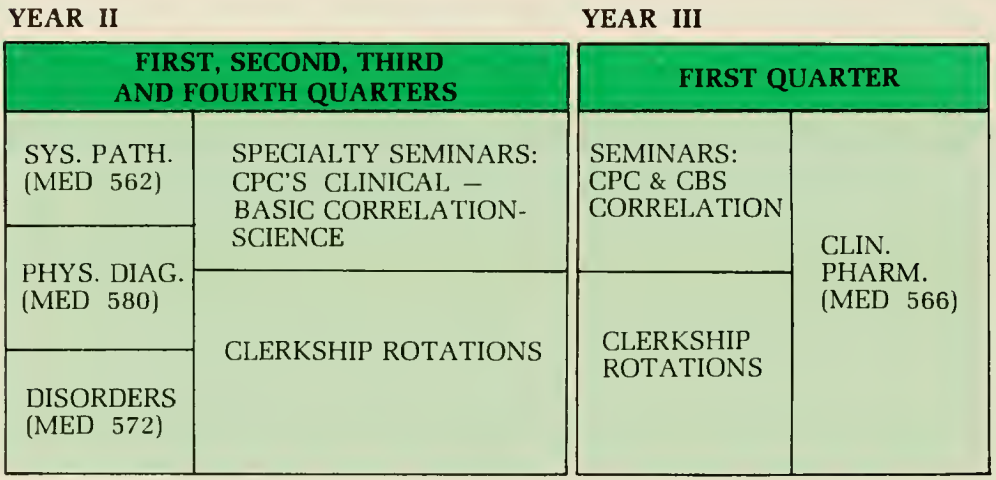
Human Systems II will consider the gastrointestinal, hematologic, renal, endocrine, and reproductive systems. Again the approach will be through examination of the anatomy, physiology, biochemistry, microbiology, and pharmacology of the systems, including representative pathologic phenomena.

Introduction to Human Behavior will be offered one afternoon a week and will deal with interpersonal interactions and personal reactions to a variety of situations. Individual students or groups of students will interview patients under the supervision of the psychiatry and general medical-surgical faculty.

The scheduling of Phase A also allows time for the student to participate in elective programs. During the entire first year, the College of Health Related Professions offers special electives to medical students in the fields of physical therapy, occupational therapy, clinical psychology, speech therapy, and hospital administration. Electives also are available in laboratory medicine. In addition, the first year student has the option to perform investigative work with a member of the faculty.

PHASE B

Phase B is designed to give a broad experience in clinical medicine. It will occupy all of the second year and approximately half of the third. Diagrammatically, it may be represented as follows:



Initial course work will consist of *Systematic Pathology, Physical Diagnosis,* and *Laboratory Diagnosis.* Systemic Pathology will emphasize the effects of disease on the human organism and the correlation of disease with symptoms, signs, and the course of illness. Physical Diagnosis will be interpreted and will utilize anatomical and radiologic demonstrations or presentations. Experience in patient interview (psychiatry) will be provided. Laboratory Diagnosis will be taught concomitantly and will familiarize the student with clinical laboratory procedures and their interpretations.

The major portion of Phase B will be devoted to the clinical clerkships, in which groups of students will rotate among the major clinical services receiving direct patient contact. During the clerkships, the student will become an integral member of the medical team and will be responsible for his patient during all hours of the day or night.

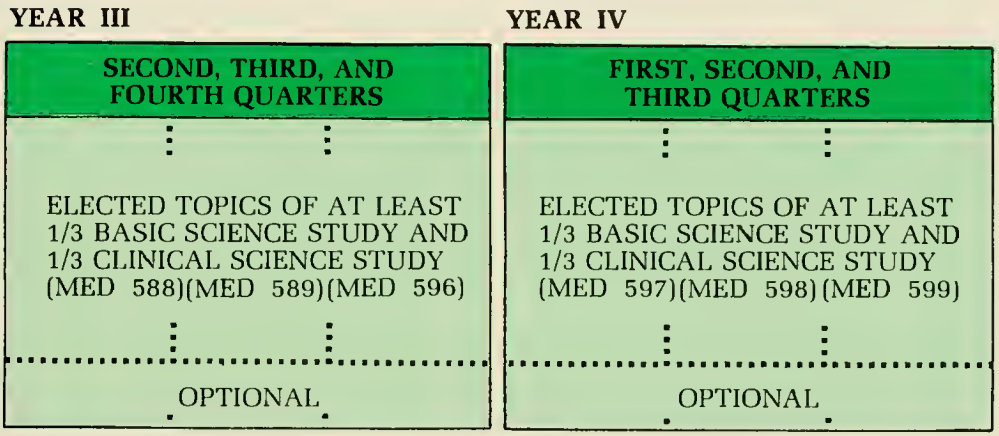
In addition to ward rounds, two hours each week will be reserved for Clinical Pathology Conferences and for Clinical-Basic Science Seminars. These sessions will be multidisciplinary in scope and will aid the student in correlating clinical and basic science information.

A four-week Clinical Pharmacology course will be taught at the conclusion of Phase B. This will be taught as a combined lecture and laboratory course and will

occupy the full-time attention of the student. The student will return to the multidisciplinary laboratories at this time.

PHASE C

Phase C occupies the last 18 months of the curriculum and consists of elective experiences. The principal requirement placed on the student is that he devote at least one-third of this period to significant basic science study and one-third to clinical study.



The student thus will be able to design an experience which could permit a full year in a clinical or basic science area, an early experience related to his career choice, or an exploration of his interests among several career choices. Considerable freedom will be permitted the student in designing his program, but the choices must be made carefully, in conjunction with the student's faculty advisors.

The science requirement can be met by several different methods: (1) by registration in formal courses in the basic science departments, (2) by engaging in a research laboratory project with a member of the faculty, and (3) by engaging in a group project supervised by the faculty. The student also may elect to satisfy the science requirement in one of the other colleges, provided he receives prior approval from his advisors and the dean.

Clinical assignments are available in all of the major disciplines of medicine. The student may work as an advanced clerk, assuming greater responsibilities than in Phase B, or in special cases he may qualify for internship at an earlier time.

EVALUATION

Students entering the program of the College of Medicine are highly motivated and are considered graduate students in a program of professional education. They are preparing themselves for a career requiring excellence of scholastic endeavor, moral integrity, sound judgment, intellectual curiosity and above all, a drive to continue their education vigorously after graduation. It is hoped that the system of evaluation will assist in attaining their objectives.

Since the evaluation of the student must provide information on both the student and the educational program, new policies for evaluation were instituted at the same time the new curriculum was implemented.

There are three major components of the evaluation system, namely project tests given by the various teaching units throughout the program, National Board Examinations Parts I and II to be administered during the first six months of Phase C and progress reports prepared by the members of tutorial groups appointed for each phase of the curriculum. The purpose of the tutorial program is to improve the education of the medical student by assisting him to relate scientific factual knowledge to clinical significance and experience and vice versa. It will also guide the student in preparing his program during Phase C. In addition, the faculty of the tutorial groups will be responsible for the evaluation of the student in terms of motivation, judgment, study habits, attitude and effectiveness of learning.

Grades submitted by the faculty of the various curricular units, comments made by the tutorial faculty, and the scores of the National Board Examinations will be the information used by the Academic Status Committee in preparing recommendations regarding promotion, graduation, and general ranking of students.

Students may, at their request, receive grades as submitted to the Office of Student Affairs. Grades submitted to the registrar will consist of "P" (pass) or "U" (unsatisfactory).

At the end of each quarter, the Committee on Academic Status will review each student's performance on the basis of his grades and the comments by the faculty and recommend to the Dean a suitable course of action. Students who receive U's in two major courses in one quarter will be dropped automatically. Appeals concerning grades or decisions by the Committee on Academic Status may be made through the Dean to the Executive Committee of the faculty of the College of Medicine. The Executive Committee's decision will be final. The Committee on Academic Status will prepare a ranking of the students to be used for recommendations for internship applications and for Alpha Omega Alpha membership.

The Committee on Academic Status will recommend to the Dean those students who have satisfactorily met its requirements and are eligible for graduation. Superior students may be recommended for graduation with honors. Nomination and selection of students will be made by the faculty. Excellence of different types in varied fields will be considered, such as superior academic work, outstanding student research and thesis, and other special achievements.

Class of 1975 and Subsequent Classes

The student must assume responsibility for some program of individual study during his tenure as a medical student. The investigative project will be such that the student will be required to submit a brief summary and title of the proposed project to the chairman of the department which will sponsor the individual study. This summary description must be submitted to the involved departmental chairman prior to the beginning of the student's final year in medical school.

GRADUATE AND POSTGRADUATE PROGRAMS

GRADUATE EDUCATION IN THE MEDICAL SCIENCES

Program Leading to the Ph.D. Degree

The educational continuum of the medical sciences is designed to provide flexibility in terms of the type of degree which may be earned as well as the type of subject matter which may be included in the individual curriculum.

Programs leading to the Ph.D. degree in Medical Sciences are offered by the College of Medicine through the Graduate School of the University. The programs offered by the Departments of Biochemistry, Immunology and Medical Microbiology, Neuroscience, Pathology, Pharmacology and Therapeutics and Physiology are intended to give talented individuals an opportunity to engage in a career of research and teaching in the basic scientific medical disciplines. Additionally, a program leading to a master's degree is available in radiation biophysics through the Department of Radiology.

The prime requirements for admission to these programs are personal integrity, motivation, and general scholastic achievement. Candidates must satisfy the general requirements for admission to the Graduate School and produce a satisfactory score on the Graduate Record Examination. A reading knowledge of a foreign language is required. Candidates should have an undergraduate major in a biological or physical science, but other undergraduate areas of concentration appropriate for study in the basic medical sciences are engineering, mathematics, and physics. In order to remedy deficiencies in their backgrounds, some candidates may find

it necessary to take occasional undergraduate courses even though they hold the A.B. or B.S. degree required for Graduate School admission.

The completion of a satisfactory dissertation based on original research is the most important single requirement of the Ph.D. program. Most of the work involved in the dissertation ordinarily will be done in the last year of residency, but candidates will be encouraged to begin their research in a preliminary exploratory fashion toward the end of their first year. Graduate education in the basic medical sciences is planned from an interdisciplinary point of view, but with a major in the fields of biochemistry, immunology and medical microbiology, neuroscience, pathology, pharmacology and therapeutics or physiology. A minor is not required but may be elected in any scientific discipline approved for graduate study in the University.

Graduate students have the opportunity of assisting in the teaching of medical and undergraduate course work and most students are advised to do this as a part of their training. Teaching assistantships and nonresident tuition scholarships are available to a limited number of students.

Individuals interested in graduate study should write directly to the appropriate departmental chairman, who will give further details regarding the program, fellowships, assistantships, and scholarships.

Medical Scientist Training Program (Combined M.D.-Ph.D. Degree)

The Medical Scientist Training Program is designed for highly qualified students who are strongly motivated toward a career in the medical sciences. This is a five to seven year program, which attempts to provide for a limited number of students an in-depth education in a basic science discipline as well as an in-breadth experience in human biology. Successful completion of this program will enable the student to enter a career of teaching and research in a basic medical science department or pursue an internship and residency program leading to a research and teaching career in clinical medicine. It is hoped students in this program may "bridge" the gap between basic science and clinically-oriented careers in the medical sciences.

Candidates for this program must satisfy admission requirements of both the College of Medicine and the Graduate School. These include satisfactory scores on both the Graduate Record Examination and the Medical College Admission Test, personal qualities of high order, and superior intellectual achievement. A strong undergraduate background in the physical and chemical sciences as well as mathematics is desirable. A genuine interest in human welfare is essential.

The selection of candidates will be based on the recommendations of three separate committees: the Medical Admissions Committee for admission to the medical program, the departmental Graduate Selection Committee for admission to the

graduate program and the Basic Science Board for admission to the Medical Scientist Training Program. The Basic Science Board consists of the heads of all basic science departments. Ph.D. programs are available in the Departments of Biochemistry, Immunology and Medical Microbiology, Neuroscience, Pathology, Pharmacology and Therapeutics and Physiology.

The student will enroll in all courses for the M.D. degree. In addition, special graduate courses and seminars will be required, as determined by the student's Graduate Advisory Committee. The Graduate Advisory Committee also will assist the student in planning his curriculum, determining his progress, and guiding his research.

In most cases the student will complete the first year of medical school while initiating a research experience. During the summer quarter before beginning a 16-18 month clerkship program, the student will take graduate courses and continue a research project. In some instances it will be possible for the student to devote one year of the last year and a half of medical school to graduate study and research. The fifth and sixth year (if necessary) will be devoted to completion of graduate courses and research. However, a student may vary this schedule by opting to complete his research prior to obtaining clinical experience.

Students will be evaluated by examinations similar to those in the separate M.D. and Ph.D. programs. The Committee on Academic Status of the College of Medicine will evaluate the student's performance and recommend promotion to the next class or awarding of the M.D. degree. The Graduate Advisory Committee, in conjunction with the basic science department from which the student will receive the Ph.D. degree, will assess his graduate performance.

Applications for this program are coordinated through the Dean's Office of the College of Medicine. Candidates should specify the basic science department to which admission is sought.

GRADUATE MEDICAL EDUCATION (INTERNSHIPS, RESIDENCIES, AND FELLOWSHIPS)

All programs of internship and residency training offered in the Shands Teaching Hospital and Clinics and the VA Hospital are fully accredited and approved by the American Medical Association's Council on Medical Education and Hospitals, and are listed in the Directory of Approved Internships and Residencies. In addition, the Senate of the University formally recognized these programs as academic non-degree programs of the College of Medicine at its meeting of June 26, 1969. The Hospitals hold maximum certification from the Joint Commission on Accreditation of Hospitals. Each of the various residency and fellowship specialty training programs has been accredited by the respective Specialty Board under the Joint Commission.

Internships: Straight internships, each 12 months in duration, are offered annually, beginning July 1, in the services of Medicine, Pathology, Pediatrics, and Surgery.

Residencies: Residencies vary in length with each of the services (between two and four years). Formal residencies are offered in anesthesiology, medicine (internal medicine, neurology), obstetrics and gynecology, ophthalmology, pathology, pediatrics, psychiatry, radiology and its subspecialties, and surgery (general, plastic, orthopedic, thoracic, neurosurgery, otolaryngology, and urology).

Stipends accompany each internship and residency. Housing at moderate cost is adjacent to the Health Center and is described on page 42.

Fellowships: A limited number of clinical fellowships are available in the various subspecialties of anesthesiology, medicine, pathology, pediatrics, psychiatry, radiology, and surgery to qualified applicants with some previous residency training and/or research pursuit. There are some traineeships which are at a slightly more advanced level pointing toward basic training for academic careers in clinical disciplines and the basic medical sciences. A postgraduate training program in laboratory animal medicine is also available.

Applications: Detailed program information and applications for these programs may be obtained by writing the appropriate departmental chairman, chief of service, or the Office of the Dean, College of Medicine.

LICENSURE

Licensure to practice medicine and surgery in Florida can be obtained by endorsement if the applicant has been certified by licensure examination of the Federation of State Medical Boards of the United States, Inc. (FLEX) or is certified by the National Board of Medical Examiners as having completed its examination; provided that said examination required shall have been so certified within the eight years immediately preceding the filing of the application for licensure. Such a license is good only if the recipient engages actively in medical practice in the state within three years after the date of issuance and continues his practice for a minimum of one year. Graduates of approved medical schools in the United States and Canada are eligible for this endorsement. In addition, graduates of foreign medical schools who otherwise are qualified and whose credentials have been evaluated by the Educational Council for Foreign Medical Graduates (ECFMG), and who have passed the American medical qualification examination for foreign medical graduates may be considered for endorsement. The applicant must have completed at least one year of approved internship or five years in private practice in the United States, its territories or Canada. He also must be a citizen of the United States or legally have declared intention to become a citizen and have been a resident of the United States for a minimum of one year.

Since various state laws differ in regard to licensure requirements, it is the responsibility of the medical student to become familiar with the qualifications for licensure in the state or states which he or she might consider as potential locations for the practice of medicine.

CONTINUING EDUCATION

The physician's proficiency in the practice of medicine depends on his continuing education. The College of Medicine recognizes its role in assisting with this aspect of education and has designated to a member of the academic staff the responsibility for inaugurating an effective means of strengthening the educational continuum through postgraduate medical education. To facilitate such a program, a Division of Postgraduate Education has been created with office space and secretarial assistance in the Lakeshore Towers.

The Division of Postgraduate Education has surveyed the needs of the practicing physician and formed a Continuing Education Council to establish priorities in continuing education for the practicing physician. These priorities have been defined and a series of two-day workshops have been designed to meet the specific needs of the practicing physician at the community hospital level. A physician from the University, along with a practicing physician, coordinate these programs to bring both academic and practical benefits to the practicing physician. In addition, national seminars based on current relevant topics are conducted with national speakers, University personnel, and practicing physicians. The interest of the practicing physician in this program has been most encouraging, and is a tribute to the desire of the medical profession to keep abreast of the current trends in medicine.

Physicians are encouraged to participate in the Postgraduate In-Service Education Program which is designed to meet the needs of the practicing physician as he perceives them. The practicing physician, in conjunction with the University preceptor, designs a program to meet his individual needs. Pre-programmed material is available to assist in his selection of an area for concentration. In this role, he acts as both teacher and student in the school's medical education program. The practicing physician usually spends one to two weeks in this program, for which a small tuition is charged.

Postgraduate Education personnel are available for consultation in program design to educational techniques, chart audit, and peer review as they relate to educational objectives of an individual hospital. Other programs in continuing medical education are conducted in cooperation with the Florida Board of Regents, the Florida Medical Association, the Florida Academy of General Practice, and a variety of medical specialty groups.

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STUDENT INFORMATION

FINANCIAL CONSIDERATIONS

For enrollment in the M.D. program of the College of Medicine, registration and course fees are $1,050 per year for Florida residents and $2,250 for nonresidents. This amount is payable in three installments in accordance with University regulations.

The Registration Fee includes a Student Health Fee and a Student Activity Fee for each of the quarters. Most of the service and facilities of the Student Health Services are available to students without charge. A group insurance program sponsored by the Student Government is available at a very reasonable cost. The Activity Fee covers the student's attendance at a wide variety of social, athletic, and cultural events which are offered by the University.

Registration dates for each class in the College of Medicine are set by the Registrar's Office and the students are notified when their group is expected to complete registration. These fees must be paid in accordance with dates published in these instructions or they are increased by $25.

Students who are interested in doing work toward an advanced degree in the medical sciences should consult the Bulletin of the Graduate School for information concerning tuition and fees.

Textbooks and instruments needed by a first-year student will require an expenditure of about $400-$600. Purchase of a microscope will not be required as the College of Medicine through a special fund has established a microscope bank and provides each entering student with a microscope on a loan basis. If desired, a student may purchase a used microscope from an upperclassman or a new one through the Medical Book Store, a branch of the University Book Store, at a cost of approximately $725.
The minimal annual cost for a single Florida resident is $3,050.

SCHOLARSHIPS

Avalon Foundation Scholarship Fund: This fund, made possible by grants from the Avalon Foundation, is available for a few non-refundable grants to outstanding medical students, and to outstanding candidates for medical school who have been accepted for admission. These grants are usually made in the form of tuition scholarships.

Blythewood & Baker Memorial Scholarship for Women Medical Students: This endowed fund, established in 1968 by Miss Martha Isabel Mays, is to be used to provide financial assistance to selected women medical students.

Faculty Scholarship Fund: Members of the faculty of the College of Medicine make individual yearly contributions toward the funding of this scholarship. The recipient may be selected from the accepted applicants to the College and from medical students nominated by faculty members on the basis of truly outstanding performance.

Health Professions Scholarship Program: Scholarships to enable talented students from low-income families to undertake the course of study required to become physicians are provided under the Health Professions Educational Amendments of 1965 (Public Law 89-290). These scholarships are available only to such students who without this financial assistance would not be able to pursue the required studies.

Genevra Todd and Henry E. Meleney Memorial Award, established originally by Dr. Henry E. Meleney in memory of his wife, is to be given to a medical student for outstanding achievement during the first year of medical study.

Avonelle C. Noah Scholarship Fund: An endowment fund was established in 1968 under the terms of the will of Mrs. Avonelle C. Noah. The income from this fund is to be used to assist worthy students in the College of Medicine.

Pfizer Scholarship: A non-refundable grant in the amount of $1,000 is available under the Pfizer Laboratories Medical Scholarship Program. This sum will be awarded to a student who, at the end of his first, second, or third year, is judged to be outstanding in his class with regard to both scholastic record and other aspects of his medical training. Financial need will be taken into account, but will not be the primary consideration.

William A. and Catherine Shands Scholarship Award: An annual scholarship award given to an outstanding medical student on the basis of scholastic record and achievements. The award is given at the discretion of the faculty and the Scholarship and Awards Committee.

Wheat Medical Scholarship Fund: An endowment fund was established in 1967 under the terms of the will of Mrs. Eva H. Wheat. The income from this fund is to be used to assist worthy male medical students (who are selected by the College of Medicine) to continue their education.

Joseph and Lee Wolfe Medical Scholarship: Established in 1968, this annual scholarship award is to be given at the discretion of the faculty to assist worthy students in the College of Medicine.

SCHOLASTIC AWARDS

Alpha Omega Alpha Honor Medical Society: The Beta Chapter of Florida was installed at the University of Florida College of Medicine on May 9, 1960. A small number of students of the junior and senior classes are eligible for membership. Selection is based upon high academic standing, personal and professional character, and promise for future contributions to medicine.

The John Gorrie Award, donated by Dr. Theodore F. Hahn, Jr., is presented each year to the graduating medical student who, in the opinion of the faculty of the College of Medicine, is the best all-around student showing promise of becoming a practitioner of the highest type.

The William C. Thomas, Sr. Award is given each year to an outstanding student with an interest in obstetrics and gynecology. The award is made by the Florida Obstetrical and Gynecological Society.

The Faculty Award for Research is given to the graduating medical student who has made the most outstanding contribution through research during the course of medical school.

The Luther W. Holloway Award was established by the Florida Pediatric Society in honor of Dr. Luther W. Holloway to be awarded to the medical student showing the greatest proficiency in child health.

The Hugh and Cornelia Carithers Award, an endowed award established by Drs. Hugh and Cornelia Carithers of Jacksonville, is presented each year to a graduating student on the basis of over-all accomplishments and aptitudes in child health and human development.

The University Medical Guild Scholarship Awards are presented each year by the University Medical Guild to a medical student who, at the end of his third year, is judged to be outstanding scholastically and to an entering student on the basis of need and scholastic merit.

The Watson Clinic Award is to be presented each year by the Watson Clinic of Lakeland to the medical student chosen by the faculty for productive effort and scientific contribution.

The Dean Mitchell Baker Award, established by Dr. and Mrs. Roy M. Baker of Jacksonville in memory of their son, is awarded each year to the graduating medical student for excellence in the field of pediatric cardiology.

The Roche Award is awarded each year to an outstanding medical student in the second-year class, based on scholarship and general performance.

Book Awards consisting of presentations each year to outstanding members of the four classes in the College of Medicine are made by Lange Medical Publications, Merck & Company, and C. V. Mosby Company.

Roger G. Schnell Neurology Book Award, established by Dr. Roger G. Schnell of Ft. Lauderdale, is to be given to a medical student who has shown excellence in the field of clinical neurology.

LOAN FUNDS

College of Medicine Loan Funds: Loans from these funds are available to students enrolled in the College of Medicine who are in good academic standing, have completed one quarter of academic work, and can show sufficient evidence of financial need. Long-term loans are limited to $1,000 per year. Interest (at four per cent) begins at graduation and continues until repayment is completed. Repayment ordinarily begins two years after graduation, but deferment can be arranged if further medical training is planned. Short-term loans are available for emergencies, but must be repaid within the school year. Equipment loans can be made to spread over a period of four years.

These funds have been made possible by grants from the Avalon Foundation, the W. K. Kellogg Foundation, the Selby Foundation, the Patrick J. O'Shaughnessy Memorial Fund, the John J. Tigert Memorial Fund, the Frederick F. Kumm, M.D., Memorial Loan Fund, the Helen Stargardt Memorial Loan Fund, the George M. Green, M.D., Memorial Loan Fund, and by gifts from several organizations and individuals within the State of Florida. Loans are administered by the College of Medicine's faculty-comprised Loan Committee.

AMA-ERF Medical Education Loan Guarantee Program: The goal of the American Medical Association Education and Research Foundation is to help eliminate the financial barrier to medicine for all who are qualified and accepted by an approved training institution. It is designed to provide a means of financing a substantial portion of the cost of a medical education for students who have performed acceptably in the first year of medical study. The Loan Program for medical students, interns, and residents is the result of a cooperative effort by American medicine and private enterprise. As much as $1,500 may be borrowed annually. These loans are repayable, with interest, after medical training is completed.

Health Professions Educational Assistance Act: The Health Professions Educational Assistance Act of 1963 provides student loans up to a maximum of $3,500 in one academic year. The loans are based on financial need, and are repayable within ten years after graduation. This period begins three years after the student ceases to pursue a full-time course of study at a school of medicine. Interest rates, specified by the Secretary of the Treasury during June of each year, are three per

cent per annum, or the designated federal rate at the time the loan is made, whichever rate is the greater.

Florida Medical Foundation Loan Guarantee Plan: Established in 1965 to provide readily available financial aid to Florida medical students, interns, and residents, the Plan is designed to permit maximum flexibility for the borrower's needs, and simplified administration for the lender. To be eligible, borrowers must be citizens of Florida and have completed their first year in an approved medical school. A maximum of $2,000 per year for three years may be borrowed with repayment to begin the fifth month after completion of internship or residency. A seven per cent simple interest rate prevails on all loans under the Plan.

Bernard J. Wagner Loan Fund: Established in 1968 this trust fund is for the purpose of assisting students of accredited medical schools to continue with their education. Preference shall be given to those who have completed the most years in medical school. Loans are repayable with interest at a rate never to exceed that prevailing rate at the time the loan is made on student loans enacted by Congress.

United Student Aid Funds: Participation in this loan fund is made possible through the use of the Ronald A. Julian Memorial Fund. USA Funds is a private, nonprofit corporation which endorses low-cost loans made by hometown banks to needy college students. Graduate students may borrow up to $2,000 per year — up to a combined total of $4,000 — with repayments beginning the fifth month after completion of graduate education. No notes under this plan may bear more than seven per cent simple interest. This interest starts when the loan is made.

Hugh and Mable Wilford Scholarship Fund: This trust fund was established in 1970 for the purpose of making loans available to assist worthy and needy students to attend the University of Florida College of Medicine. This loan fund will be administered in accordance with procedures established for the Health Professions Student Loan Program.

Other Sources: Many students have received financial support from local sources. These may be discovered by inquiries addressed to voluntary health agencies, medical organizations, service clubs, church organizations, or trust departments of banks.

FELLOWSHIPS

Student Research Fellowships: These fellowships are made possible by grants from voluntary health agencies in Florida, pharmaceutical firms, the National Institutes of Health, and other agencies. The purpose of the fellowships is to encourage research pursuits by medical students and to enable them to undertake experimental investigations during the summer, under the guidance of a faculty member. Such

studies are helpful to the student in determining the degree of emphasis he wishes to place on certain pursuits, and provide opportunity for additional training in the intellectual techniques of analysis and synthesis. Special fellowships may be awarded to permit full-time research for a period of one year between medical studies, or to allow research as a full-time resident after graduation, whether working toward a specialized or advanced degree or not. A limited number of fellowships are available for the summer preceding matriculation in the first year for those students who wish to continue research already begun, or to begin experimental work at the earliest moment. Selection for these fellowships is made by a faculty committee after the student has obtained a sponsor and submitted a written research proposal.

LIVING ACCOMMODATIONS

Housing on campus should be arranged through the Office of the Director of Housing, University of Florida, Museum Road at S.W. 13th Street, Gainesville, Florida (392-2181). Beaty Towers have been reserved for upper division and graduate students with suites at $175 per quarter per student. For married students, apartments in Corry, Diamond, and Schucht Memorial Villages are available. These are modern two-story buildings of brick construction containing one, two, and a few three-bedroom apartments ($65-$80 per month). The 104 units comprising Schucht Village are adjacent to the Shands Teaching Hospital and Clinics and priority is given, when possible, to housestaff and upperclass medical students who have clinical responsibilities requiring immediacy to the Health Center. To secure favorable consideration, application for on-campus housing should be made immediately upon acceptance to the College of Medicine.

Private homes and privately operated rooming houses and apartments provide many accommodations for students. The University's Division of Housing also offers a referral service through the Off-Campus Housing Section where current listings are available. These listings are not compiled for mailing since they are subject to constant change, and mutually satisfactory rental arrangements can be made normally only by the student after a personal inspection of facilities and a conference with the landlord. Initial contacts should be made at least thirty days before school begins.

COURSE DESCRIPTIONS

PHASE A

The following courses comprise the basic medical science background (Phase A) of the curriculum for the M.D. degree, and are offered to medical and dental students during the first year. Many are available to graduate students in the University, although the number of students who can be accepted is limited by laboratory facilities.

MED 539 INTRODUCTION TO MEDICAL SCIENCES
4 credits. Patient care presentations dealing primarily with problems relating to metabolic diseases in man, followed by in-depth discussions of the basic phenomena designed to help students understand the pathophysiology of the diseases.

MED 540 CELL BIOLOGY
11 credits. Lectures, discussion, and tutorial sessions to increase the student's basic knowledge of cellular functions in health and disease. The structure and molecular biology of the mammalian cell are stressed, including such things as virus-cell interaction, inborn errors of metabolism, and bacterial growth.

MED 541 CELL BIOLOGY LABORATORY
1 to 6 credits. Corequisite: MED 540. Course is project oriented to allow individual or small group work with a faculty member. Registration by permission only.

MED 542 INTRODUCTION TO HUMAN BEHAVIOR I
2 credits. Patients' interactions with disease, treatment, family, and community are explored. Interviews with patients to develop skills in communication along with appreciation of subjective experiences of both patients and doctors. Community program developments and selected behavioral science contributions to health care are included. Creative collaboration between students and faculty encouraged to meet the increasingly urgent psychosocial concerns of medicine.

MED 543 INTRODUCTION TO HUMAN BEHAVIOR II
3 credits. Continuation of MED 542.

MED 544 INTRODUCTION TO HUMAN BEHAVIOR III
3 credits. Continuation of MED 543.

MED 545 HUMAN SYSTEMS I
15 credits. Introduction to tissues of the human body; detailed study of systems, including neuro-behavioral, musculoskeletal, respiratory, and cardiovascular. The anatomy, physiology, biochemistry, and pharmacology of these systems, including representative pathologic phenomena.

MED 546 HUMAN SYSTEMS II
15 credits. Prerequisite: MED 545. The anatomy, physiology, biochemistry, and pharmacology of the gastrointestinal, hematologic, renal, endocrinologic, and reproductive systems, including representative pathologic phenomena.

MED 547 TUTORIAL
2 credits. A student will meet regularly with a faculty member to discuss curriculum problems, career choices, developments in medicine, etc. Primary purpose is to develop a meaningful relationship between a given student and faculty member and thereby to maximize the educational experience of the student.

MED 548 TUTORIAL
2 credits. A continuation of MED 547.
MED 549 TUTORIAL
2 credits. A continuation of MED 548.

PHASE B

Most of the following courses involve detailed day-to-day care of patients in the Shands Teaching Hospital and Clinics. They require highly specialized professional preparation as well as large amounts of time which must, of necessity, be somewhat irregularly scheduled as particular patients are available. These courses, therefore, are limited to candidates for the M.D. degree. The individual clinical courses offered are integral parts of the teaching program in the Phase B portion of the curriculum. With the exception of MED 562, 572, and 580, these courses are offered to parts of the class in rotation for periods of approximately two months.

MED 562 SYSTEMIC PATHOLOGY
3 hours lecture and conference, and 8 hours laboratory. 11 credits. Prerequisites: MED 561 and completion of first year of medical school. Functional and anatomical pathologic changes are correlated with etiology, pathogenesis and clinical manifestations of human disease. Participation in the autopsy program is required.
MED 566 ADVANCED PHARMACOLOGY
One month. 6 credits. Lectures, conferences and laboratory. Fundamentals of drug action are studied with emphasis on cardiovascular, neurological, and endocrine systems. Joint teaching in basic aspects of appropriate clinical areas (e.g., anesthesia, ophthalmology) will be conducted.
MED 572 DISORDERS OF THINKING, EMOTION AND BEHAVIOR
4 credits. This course enables second year medical students to improve interviewing techniques to learn symptomatic psychopathology, to conduct comprehensive examinations and interrelate symptoms and to become familiar with descriptive and dynamic aspects of common clinical syndromes and diagnostic categories. Small group teaching is devoted to lecture-demonstrations and clinical work.
MED 580 BASIC CLINICAL CLERKSHIP
Two months. 7 credits. With the participation of all clinical departments the student is introduced to the common and basic components of physical and laboratory examinations, techniques of interview and history taking, and care of the patient in all fields of medicine.
MED 583 COMMUNITY HEALTH CLERKSHIP
8 credits. This is a five week clinical rotation in which students participate in health care in various community settings. Experiences in rural areas, big city ghettos, or preceptorships with practicing physicians will be individually arranged. Whenever possible the student will live in the community he serves so he can see first hand medical and health problems as they exist in different communities as well as the success and shortcomings of present day care in meeting them. The community health clerkship will be coordinated with the medicine and pediatric clerkship.
MED 585 PSYCHIATRIC CLERKSHIP
Two months. 12 credits. Observation and treatment of psychiatric patients in the Teaching Hospital and Outpatient Clinic. Experience and instruction is given in the application of this material to the practice of medicine.
MED 586 OBSTETRICAL AND GYNECOLOGICAL CLERKSHIP
Two months. 12 credits. Participation in obstetric and gynecologic management of women in the

Shands Teaching Hospital and Clinics provides a learning experience with an appropriate degree of responsibility. The student focuses attention on the subject of biology and reproduction.

MED 591 MEDICAL CLERKSHIP

Two months. 12 credits. Active participation under supervision in ward and clinic care of patients. Close tutorial relationship with staff in lectures, conferences and teaching rounds. A program in clinical therapeutics is conducted jointly with the Department of Pharmacology and Therapeutics.

MED 592 PEDIATRIC CLERKSHIP

Two months. 12 credits. Participation in medical and surgical management of infants and children in the Teaching Hospital, Ambulant Wing, Emergency Room, and Pediatric Clinic provides a learning experience with an appropriate degree of responsibility. The student focuses attention on the role of biological and emotional growth in the expression of illness in children.

MED 593 SURGICAL CLERKSHIP

Two months. 12 credits. Experience in the care of surgical patients in the ward and in the operating room. Instruction in surgical biology is provided by a series of daily seminars and lectures.

PHASE C

Within the general framework of Phase C, a student will register for 20 credit hours of which 4-20 hours are chosen from Elected Topics and the balance from other offerings in the College of Medicine and the University. The total curricular program must be approved by the College of Medicine prior to registration.

MED 588 ELECTED TOPICS I

4-20 credits. Offered by all medical science and clinical departments of the College as an opportunity for concentrated work in a field of particular interest to the student. Individual research, a preceptorship, or clinical clerkship in the College or in another medical center in this country or abroad may be elected.

MED 589 ELECTED TOPICS II

4-20 credits. Same as MED 588.

MED 596 ELECTED TOPICS III

4-20 credits. Same as MED 588.

MED 597 ELECTED TOPICS IV

4-20 credits. Same as MED 588.

MED 598 ELECTED TOPICS V

4-20 credits. Same as MED 588.

MED 599 ELECTED TOPICS VI

4-20 credits. Same as MED 588.

GRADUATE COURSES IN THE MEDICAL SCIENCES

Programs leading to the M.S. in Radiation Biophysics and the Ph.D. in Medical Sciences (with a major in biochemistry, immunology & medical microbiology, neuroscience, pathology, pharmacology & therapeutics, or physiology) are offered by the College of Medicine. Training in these scientific disciplines is planned to

give experience in research and teaching, rather than in clinical practice for which the M.D. degree program is designed.

Although no graduate major may be completed without adequate course work at the 600 level or higher, these 500 level courses also are available for graduate credit as part of the candidate's major.

MED 501 GROSS ANATOMY
6 credits. The basic structure and mechanics of the human body are taught primarily in the laboratory but supplemented with lectures, conferences, and demonstrations, as needed.

MED 502 APPLIED GROSS ANATOMY
7 credits. A continuation in depth of MED 501 with emphasis on applied and correlative aspects.

MED 503 MICROSCOPIC ANATOMY
6 credits. The microscopic structure of the cells, tissues, and organs of the human body is taught. Correlation of the structure and function is strongly emphasized. Fresh tissues are used when profitable and each student is issued a loan collection of prepared slides. Recent advances in knowledge of cellular structure, acquired by the use of the phase and electron microscopes, are included.

MED 504 NEUROHUMORS IN THE CENTRAL NERVOUS SYSTEM
3 credits. Identical with PSY 533. Prerequisite: PSY 416 or equivalent. Synthesis, action, and metabolism of putative neural transmitters; pharmacological means of altering these; physiological or behavioral functions attributed to putative neural transmitters.

MED 508 FUNDAMENTALS OF RADIATION PROTECTION
4 credits. Identical with EGC 508. Prerequisite: An undergraduate major in one of the sciences or engineering and consent of instructor. Survey of radiation sources, uses, and effects on humans; examination of radiation protection literature and philosophy; practical radiation protection methods and techniques; review of radiation exposure standards, regulations, and legislation.

BCH 511 BIOCHEMISTRY
4 credits. Prerequisite: Organic chemistry. The first half of 511-512. Lectures, structure, function and metabolism of cellular constituents. Topics considered will include structure, biosynthesis and function of macromolecules; bioenergetics; enzyme mechanisms; intermediary metabolism; transport processes; biological control mechanisms.

BCH 512 BIOCHEMISTRY
4 credits. The second half of 511-512.

MED 518 PHYSIOLOGY OF VISION
4 credits. Identical with PSY 518. Prerequisite: PSY 416 or ZY 475 or equivalent with consent of instructor. The visual process and supporting systems approached from the orientation of human vision.

MED 520 PHYSIOLOGICAL MECHANISMS
5 credits. Prerequisites: General chemistry, physics, and biology. Basic mechanisms of mammalian physiological processes; circulatory and respiratory mechanics; transport, distribution and storage of substances in spaces and compartments of the body; excitability of tissues; muscular contraction; sensory mechanisms; reflex activity.

MED 521 METHODS AND TECHNIQUES OF PHYSIOLOGY
2 credits. Techniques and exercises in experimental physiology; measurements of circulatory, respiratory, renal, endocrine, nervous, and muscle function.

MED 534 NEUROSCIENCES
(Offered jointly by Department of Neuroscience and Department of Physiology) 6 hours lecture and

conference, and 7 hours laboratory. 6 credits. Prerequisite: Consent of instructor. Principles of nervous system structure and function are taught, followed by in-depth study of timely nervous system topics. Special reference is made to the human brain. Correlation of physiology, behavior, metabolism and anatomy of the brain, spinal cord, nerves and special sense organs is emphasized.

MED 554 MEDICAL PARASITOLOGY

2 credits. Introduction to the major groups of animal parasites infecting man with special emphasis on life history, epidemiology, and laboratory diagnosis.

BCH 578 CHEMISTRY OF BIOLOGICAL MOLECULES

4 credits. Prerequisites: Organic chemistry (CY 373 or CY 579), physical chemistry (CH 453 or CY 342, or consent of instructor). Mechanistic organic biochemistry. Emphasis on model systems, enzyme active sites, and physical and organic chemistry or biomacromolecules.

The following courses are offered by each participating department. Most of these courses, as well as others listed below, are also available to qualified graduate students from other divisions of the University.

MED 630 RESEARCH IN MEDICAL SCIENCES

1 to 15 credits. May be repeated for credit. Supervised research other than that toward fulfillment of the thesis or dissertation research in Departments of Biochemistry, Immunology and Medical Microbiology, Neuroscience, Pathology, Pharmacology & Therapeutics, Physiology and Radiation Biophysics.

MED 697 SUPERVISED RESEARCH

1 to 15 credits. Credit not applicable toward degrees. May be repeated.

MED 698 SUPERVISED TEACHING

1 to 5 credits. Credit not applicable toward degrees. May be repeated.

MED 699 MASTER'S RESEARCH: BIOCHEMISTRY, IMMUNOLOGY AND MEDICAL MICROBIOLOGY, NEUROSCIENCE, PATHOLOGY, PHARMACOLOGY & THERAPEUTICS, PHYSIOLOGY, AND RADIATION BIOPHYSICS

0 to 15 credits.

MED 799 DOCTORAL RESEARCH: BIOCHEMISTRY, IMMUNOLOGY AND MEDICAL MICROBIOLOGY, NEUROSCIENCE, PATHOLOGY, PHARMACOLOGY & THERAPEUTICS, AND PHYSIOLOGY

1 to 15 credits.

BIOCHEMISTRY

The Department offers programs leading to the Ph.D. in medical sciences, with a major in biochemistry, and to the Ph.D. in biochemistry. Ordinarily, candidates for the M.S. degree alone will not be accepted.

Prerequisites: Since biochemistry is a multi-disciplinary field, the undergraduate major may be in related biological and physical sciences. Required courses include general, organic, quantitative and physical chemistry and at least 8 credits in physics and in biology. Calculus is recommended. Pre-baccalaureate courses in biochemistry are not accredited for the graduate program. Any deficiency in the prerequisites must be satisfied as soon as possible after entering Graduate School. Doctoral candidates are required to take a core of biochemistry courses which include

BCH 601, BCH 602, BCH 603, MED 615, MED 616, MED 617. Depending upon the interests and background of the student additional courses are recommended from the following list: BCH 578, BCH 605, BCH 612, MED 613, MED 614, MED 618, and MED 619.

The course of graduate study for doctoral candidates also includes advanced organic and physical chemistry, physiology, microbiology and genetics.

MED Courses Available for Graduate Major Credit in Biochemistry:

MED 614 BIOENERGETICS AND ENZYME MECHANISMS
4 credits. Prerequisites: BCH 601, BCH 602, BCH 603, and physical chemistry. Current aspects of the mechanisms of enzyme action and the energy transformations occurring in biological systems.

MED 615 RESEARCH METHODS IN BIOCHEMISTRY
2 to 6 credits. Corequisites: BCH 601, BCH 602, BCH 603. Only by special arrangement. Biochemical research in which the student refines his research techniques in physical biochemistry, intermediary metabolism, radioisotopes, etc. under supervision of a staff member. May be repeated with change of content up to a maximum of 12 credits.

MED 616 BIOCHEMISTRY SEMINAR
1 credit. Required of graduate students in biochemistry; open to others by special arrangement. Research reports and discussions of current research literature are given by the departmental staff, invited speakers, and graduate students.

MED 617 SPECIAL TOPICS IN BIOCHEMISTRY
2 credits. Required of graduate students in biochemistry; open to others by special arrangement. Supervised study in journals, treatises, and monographs in various subject areas of biochemistry with informal weekly conferences and reports. May be repeated with change of content up to a maximum of 6 credits.

The following courses are being offered as part of the *Program in Molecular Biology* (See Graduate Catalog).

MED 613 MOLECULAR BIOLOGY 1
4 credits. Prerequisites: General course in biochemistry and consent of instructor. Chemical and physicochemical characteristics of the molecules concerned with heredity, gene replication, and mutation, and of their biosynthesis and function.

MED 618 MOLECULAR BIOLOGY 2
4 credits. Prerequisites: General course in biochemistry and consent of instructor. Biochemistry of nuclei, ribosomes, mitochondria, chloroplasts, Golgi bodies, lysosomes, cell walls and membranes; compartmentation and integrated cellular function.

MED 619 MOLECULAR BIOLOGY 3
4 credits. Prerequisites: General course in biochemistry and consent of instructor. The relationship between cell structure and function: 1) organization of chromosomes, RNA synthesis, and translation of the genetic code into functional entities; 2) organization of cellular membranes; 3) ultrastructure, function, and biosynthesis of subcellular organelles; 4) regulatory mechanisms of the cell; correlation of *in vitro* and *in vivo* experiments.

MED courses numbered 613 through 619 are identical with BCH courses of the same number.

BCH Courses Available for Graduate Major Credit in Biochemistry:

BCH 601 BIOCHEMISTRY 1
3 credits. Prerequisite: Organic chemistry; corequisite: Physical chemistry. Structure, function and metabolism of cellular constituents. Topics considered will include: structure, biosynthesis and function of macromolecules; bioenergetics; enzyme mechanisms; intermediary metabolism; transport processes; biological control mechanisms.

BCH 602 BIOCHEMISTRY 2
3 credits. Continuation of BCH 601.

BCH 603 BIOCHEMISTRY 3
3 credits. Continuation of BCH 602.

BCH 605 LABORATORY METHODS OF BIOCHEMISTRY 1
2 credits. Corequisite: BCH 601. Introduction to laboratory methods including colorimetry, spectrophotometry, chromatography, cellular fractionation and techniques of enzymology. Experiments in intermediary metabolism and introduction to isotopic methods.

BCH 612 PHYSICAL BIOCHEMISTRY
4 credits. Prerequisites: General course in biochemistry (BCH 601 or BCH 511) and either physical chemistry or consent of instructor. Physical chemistry and molecular structures of proteins, enzymes, and nucleic acids. Fundamentals of physical biochemistry techniques.

IMMUNOLOGY AND MEDICAL MICROBIOLOGY

The Department offers a program leading to the Master of Science and Doctor of Philosophy degrees in immunology and medical microbiology, including the fields of parasitology and virology. Through individual planning of course work, research and teaching, the graduate student is offered an educational atmosphere to help him develop certain skills and gain intellectual independence and initiative. The program is in close collaboration with the Department of Microbiology in the College of Arts and Sciences.

The undergraduate preparation for graduate study in immunology and medical microbiology should be wide in scope and should include general biology, physics, chemistry (2 to 3 years including organic and quantitative analysis), and preferably statistics, calculus, physical chemistry, genetics, and bacteriology. A bachelor's degree in bacteriology or microbiology is not required. In Graduate School the student will at first obtain a general background in microbiology as preparation for research and teaching. The remaining course work should be arranged according to the student's interest and competence. Emphasis is placed in the following areas: virology, immunology, immunochemistry, infectious diseases, microbial genetics and parasitology.

MED 650 PUBLIC HEALTH MICROBIOLOGY
1 to 6 credits. Maximum 18 credits. Identical with MCY 650. Prerequisites: Permission of chairman of department and director of laboratories. References study and laboratory practice of diagnostic techniques in the Microbiology Diagnostic Laboratories of the Shands Teaching Hospital, University of Florida J. Hillis Miller Health Center, or in residence at the Bureau of Laboratories, State Department of Health, Jacksonville.

MED 651 SPECIAL TOPICS IN MICROBIOLOGY
1 to 6 credits. Identical with MCY 651. Prerequisite: 6 credits in graduate major courses. Organized study of contemporary research in a particular aspect of general microbiology. May be repeated with change of content.

MED 652 VIROLOGY
5 credits. Identical with MCY 652. Nature of viruses and mechanisms of viral replication.

MED 653 VIROLOGY LABORATORY
3 credits. Identical with MCY 653. Prerequisite or corequisite: MED 652. Selected laboratory experiments on the nature of viruses and mechanisms of viral replication, as well as other consequences of viral infections.

MED 654 RESEARCH PLANNING
5 credits. Identical with MCY 654. Prerequisite: 20 credits in progressive study of microbiology. An outline of the processes involved in scientific research, including initiating a problem, experimental techniques, analysis and evaluation of data, and reporting, illustrated by bacteriological examples.

MED 655 EXPERIMENTAL MICROBIOLOGY
2 to 5 credits. Identical with MCY 655. Prerequisites: 12 credits in microbiology and consent of instructor. Application of physical, chemical and biological techniques to experimental problems in microbiology. Individual laboratory study under supervision. May be repeated with change of content up to a maximum of 8 credits.

MED 656 THE LITERATURE OF MICROBIOLOGY
3 credits. Identical with MCY 656. Prerequisites: 12 credits of microbiology and consent of instructor. Bibliographic method in searching the literature. The literature of specified areas of the discipline.

MED 657 MICROBIAL METABOLISM
5 credits. Identical with MCY 657. Prerequisite: BCH 603. The intermediary metabolism of microorganisms; emphasizes those metabolic pathways that are unique or characteristic primarily of microorganisms.

MED 658 MICROBIAL PHYSIOLOGY
5 credits. Identical with MCY 658. Prerequisite: MED 657 or consent of instructor. The structural and functional elements of microorganisms and the mechanics of their regulatory system. Mechanisms of control of microbial DNA replication, cell division, ribosome and cell-wall formation; kinetic studies of normal and abnormal growth.

MED 659 PRINCIPLES OF IMMUNOLOGY
5 credits. Identical with MCY 659. Prerequisite: MCY 505 or MED 551. Biological and biochemical aspects of host resistance and immunity, with special emphasis on the chemical and physicochemical properties of the proteins of immune reactions.

MED 660 IMMUNOLOGY LABORATORY
3 credits. Identical with MCY 660. Corequisite: MED 659. Consent of staff is required for registration.

MED 661 BIOLOGY OF UNCOMMON MICROORGANISMS
5 credits. Identical with MCY 661. Prerequisites: MCY 305, and consent of instructor. Natural distribution, metabolic activities, isolation and culture of selected groups of microorganisms.

MED 662 MICROBIAL GENETICS
5 credits. Identical with MCY 662. Prerequisites: MCY 520, MCY 521, general genetics. Microbial genetics, including mutation, selection, transformation, transduction, conjugation and episomal factors, molecular structure and function of genes.

MED 663 PARASITIC DISEASES OF THE TROPICS AND SUBTROPICS
5 credits. Identical with MCY 663, ZY 663, and VY 663. A course in animal parasitology covering the mechanisms of parasitic infections, the physiology of parasites and the immune responses of the host; public health, veterinary and general aspects of various parasites affecting man and animals.

Laboratory work includes experiments showing the effects of nutrition on parasites; immune responses, factors and modes of transmission; life cycles; morphology.

MED 644 VIRAL DISEASES

3 credits. Identical with MCY 664. Prerequisite: MED (MCY) 652. Pathogenesis of viral disease including cytopathic and oncogenic viruses. Diagnostic and preventive measures.

MED 665 MICROBIAL INFECTIONS

5 credits. The pathogenesis of selected bacterial and fungal diseases emphasizing the clinical and pathological aspects of human infection.

MED 666 MICROBIOLOGY 1

6 credits. Identical with MCY 666. Intensive review of principles of immunity, physiology and genetics of bacteria, virology, infection, and ecology (see also MED 667).

MED 667 MICROBIOLOGY 2

3 credits. Identical with MCY 667. Continuation of MED 666.

MED 668 REGULATION IN BIOLOGICAL SYSTEMS

5 credits. Identical with MCY 668. Prerequisites: MCY 520, 521; MED 657; BCH 601, 602. Control of enzyme activity: kinetic control (allosteric and non-allosteric), control at the energy level, permeases. Control of enzyme synthesis: positive and negative; repression, induction, catabolic repression, cyclic AMP. Regulation in higher organisms; hormonal control.

MED 699 SEMINAR

1 credit. Identical with MCY 669. Attendance is required of all graduate majors at one research presentation and one graduate report each week as scheduled. May be repeated with change of content.

MED 750 JOURNAL COLLOQUY

1 credit. Identical with MCY 750. Critical presentations and discussion of recent original articles in the microbiological literature. May be repeated with change of content.

MED 751 RESEARCH CONFERENCE

1 credit. Identical with MCY 751. Critical discussion and appraisal of research programs of the faculty and students of the department. May be repeated with change of content.

NEUROSCIENCE

The Department offers a program leading to the Doctor of Philosophy degree in the basic neurosciences. Undergraduate preparation should include credits in biological chemistry, physics, mathematics, and behavioral sciences. Deficiencies may be remedied by taking undergraduate courses, individual work, or special examinations during the first year of graduate training. Required courses for most graduate students will include MED 534, MED 600, MED 633, and MED 676 unless equivalent studies have been taken elsewhere. The remainder of the graduate program will consist of laboratory research, courses, and seminars in this and other departments which have been selected jointly by the student and his advisory committee.

MED 600 HISTORY OF THE NEUROSCIENCES

3 credits. Prerequisite: Consent of instructor. History of the discoveries, concepts, and technical advances in the nervous system disciplines from ancient to modern times. The emergence of the several neurosciences as experimental disciplines that provide a foundation for rational medical applications.

MED 601 SEMINAR: SOMESTHESIS AND PAIN
4 credits. Current research on central nervous system coding and information transfer, using somesthesis as a model with particular emphasis on pain.

MED 603 COMPARATIVE NEUROLOGY
4 credits. Prerequisite: MED 534 or equivalent. The phylogenetic development of the central nervous system of vertebrate animals considered from the behavioral, anatomical, and physiological points of view.

MED 622 PHYSIOLOGY OF THE CENTRAL NERVOUS SYSTEM
3 credits. Special and current problems in brain and spinal cord function covered in seminars.

MED 623 NEUROPHYSIOLOGY
3 credits. Physiology of nerve and muscle, central nervous system, and the special senses.

MED 633 NEUROBIOLOGY
5 credits. Prerequisite: Background in biological or behavioral sciences. Structure and physiology of the nervous system as it pertains to control of behavior.

MED 635 NEUROENDOCRINOLOGY
4 to 6 credits. Prerequisites: Permission of instructor. Neural regulation of endocrine systems in vertebrate animals. Correlative study of neuroanatomical, neurophysiological and neurochemical aspects of endocrine control.

MED 676 NEUROHISTOLOGY
4 credits. Prerequisites: MED 534 and consent of instructor. Histological approaches and techniques for the study of the neuronal, neuroglial, and mesenchymal cellular components of the central and peripheral nervous system.

MED 677 NERVE AS A TISSUE
2 credits. Prerequisite: Permission of instructor. Seminar on current research problems in the area of cellular interactions in the nervous system. Readings and discussion from articles in the fields contributing to the physiology, chemistry and anatomy of the nervous system.

MED 711 NEURAL-BEHAVIORAL-ENDOCRINE INTERACTIONS
4 credits. Prerequisite: Consent of instructor. Interrelationships of endocrine hormones, nervous system activity, and behavior. Sample topics include the role of hormones in sexual behavior, aggression, stress, parental behavior, learning and memory, mood, and target organ physiology.

MED 712 NEUROBEHAVIORAL RELATIONS
4 credits. Identical with PSY 712. Prerequisite: MED 534 or consent of instructor. Theories and data on the central nervous system basis for higher order function. Emphasis will be on arousal, purposeful behavior, and learning.

MED 713 INFORMATION STORAGE: A NEUROBIOLOGICAL APPROACH
4 credits. Identical with PSY 606. Prerequisite: MED 534 or consent of instructor. Consideration of data dealing with basic issues concerning the nature and behavioral plasticity and information storage and their central nervous system foundations. Particular emphasis will be paid to memory disruption and facilitation as an experimental tool in the study of memory processes.

MED 714 DEVELOPMENTAL NEURAL-BEHAVIORAL-ENDOCRINE INTERACTIONS
4 credits. Prerequisites: Consent of instructor. Interrelationships and roles of endocrine hormones, behavior, and nervous system activity during the perinatal period on the development of adult patterns of neuroendocrine activity and behavior.

MED 715 NEURAL MECHANISMS OF INGESTION AND ENERGY REGULATION
2 to 4 credits. Identical with PSY 715. Neuroanatomical, neurobehavioral, and neuroendocrinological mechanisms involved in the regulation of food and water consumption and regulation of body weight.

MED 716 COLLOQUIUM IN NEUROBIOLOGY
1 to 2 credits. Prerequisite: Consent of instructor. Current theoretical issues that relate to the

neurophysiological, physiological, chemical and behavioral approaches to the study of the nervous system. May be repeated with change of content up to a maximum of 16 credits.

MED 717 PHYSIOLOGICAL BASIS OF BRAIN RHYTHMS

3 credits. Prerequisite: Consent of instructor. An analysis of the structural, physiological and pharmacological substrates for electrical activity of the central nervous system as manifested in the normal electroencephalogram including the development and relationship to evoked potentials.

MED 718 NEUROSCIENCE SEMINAR

1 to 2 credits. Prerequisite: Permission of instructor. Readings and discussion of current topics in neuroscience. May be repeated with change of content up to a maximum of 16 credits.

MED 719 SPECIAL TOPICS IN NEUROSCIENCE

1 to 6 credits. Prerequisite: Permission of instructor. Intensive reading and lectures in specialized fields of neuroscience and allied disciplines. May be repeated with change of content up to a maximum of 16 credits.

MED 720 RESEARCH METHODS IN NEUROSCIENCE

1 to 10 credits. Prerequisite: Permission of instructor. Research techniques in neurohistory, neurophysiology, neuroendocrinology, neurochemistry, neuropharmacology, neurobehavioral science, experimental neurology, neuroscience instrumentation, or electron microscopy under supervision of a staff member. May be repeated with change of content up to a maximum of 16 credits.

PATHOLOGY

Prerequisites: Students entering this program will be required to have the following undergraduate courses: general chemistry, organic chemistry, general physics, general biology, and two or more advanced courses in the area of physiological, developmental or cellular biology or, in the case of students in clinical chemistry, courses in analytical, inorganic, and physical chemistry. Students may find it necessary to remedy deficiencies in their background by taking some undergraduate courses after admission to the Graduate School.

Courses in the major program will be determined by the graduate student's advisory committee. The minor may be taken in any appropriate area.

Thesis: Satisfactory completion of a thesis based on research is a requirement for a graduate degree.

MED 604 ADVANCES IN SUBMICROSCOPIC ANATOMY

4 credits. Prerequisites: Histology or cytology; approval of the staff. Ultrastructure in cells and tissues of vertebrate forms. Current research trends and functional connotations where pertinent.

MED 605 RESEARCH METHODS IN ANATOMY

1 to 6 credits. Research techniques of histochemistry, radiation biology, experimental embryology, teratology, endocrinology, or electron microscopy under supervision of a staff member. May be repeated with change of content up to a maximum of 12 credits.

MED 606 ANATOMY SEMINAR

1 to 3 credits. Research reports and discussions of current research literature by departmental staff and graduate students. May be repeated with change of content up to a maximum of 12 hours.

MED 608 SPECIAL TOPICS IN ANATOMY
1 to 6 credits. Readings in the recent literature of anatomy and allied disciplines. May be repeated with change of content up to a maximum of 15 credits.

MED 609 EMBRYOLOGY AND ORGANOGENESIS
4 credits. Prerequisite: ZY 309 or MED 501. Human and higher mammalian development, with emphasis on maldevelopment. Physiological and clinical considerations stressed where pertinent.

MED 610 MECHANISMS OF DISEASE
5 credits. General principles of pathology and the mechanisms responsible for disease processes. May be taken by advanced undergraduates with consent of staff.

MED 611 SYSTEMIC PATHOLOGY
6 credits. Prerequisites: MED 610 and consent of staff. Pathological processes affecting each organ or organ system.

MED 632 TECHNIQUES IN ELECTRON MICROSCOPY
3 to 5 credits: Prerequisites: Histology and cytology. Proficiency acquired in techniques of specimen preparation and analysis for ultrastructure investigation and in use of the ultramicrotome, high vacuum evaporator, and electron microscope.

MED 640 CLINICAL CHEMISTRY AND TOXICOLOGY
3 credits. Chemical techniques undertaken for the diagnosis of disease. Methods of toxicology.

MED 641 SPECIAL CYTOLOGY
5 credits. Types of cells such as nerve, secretory, bone, muscle, connective tissue, blood, and lymphoid.

MED 643 CLINICAL CHEMISTRY AND TOXICOLOGY ROTATION I
10 credits. Participation in all phases of practical clinical chemistry and toxicology. Chemical methodology, clinical interpretation, and significance of laboratory measurements for the diagnosis of the sick. Individual investigative project in clinical chemistry and toxicology. Students specializing in clinical chemistry must spend three terms on this rotation.

MED 644 CLINICAL CHEMISTRY AND TOXICOLOGY ROTATION II
10 credits. Prerequisite: MED 643. Continuation of MED 643.

MED 645 CLINICAL CHEMISTRY AND TOXICOLOGY ROTATION III
10 credits. Prerequisite: MED 644. Continuation of MED 644.

MED 646 SPECIAL TOPICS IN PATHOLOGY
1 to 6 credits. Prerequisite: Permission of department. Supervised conferences and laboratory work. Topics selected to meet each student's needs. May be repeated with change of content up to a maximum of 18 credits.

MED 647 SEMINAR IN PATHOLOGY
1 credit. Required of graduate students in pathology; open to others by permission of the department. Current research literature and research reports by graduate students, department staff, and invited speakers.

MED 648 COMPARATIVE PATHOLOGY
4 credits. Prerequisites: MED 561, MED 511. The diseases of various organ systems of domestic and laboratory animals compared and contrasted with spontaneous diseases of man.

MED 649 NUTRITIONAL AND BIOCHEMICAL PATHOLOGY
4 credits. Prerequisites: MED 561, MED 511. The relationships between biochemical alterations and microscopic lesions in spontaneous and experimentally induced diseases having a defined nutritional or biochemical etiology.

MED 678 ADVANCED MICROSCOPIC ANATOMY
4 to 6 credits. Prerequisites: MED 503 or ZY 521; consent of instructor. Histological approaches and techniques relevant to selected research areas. Lectures, microscopic study, and laboratory project relating structural and functional aspects of a problem.

MED 679 ADVANCED GROSS ANATOMY
3 to 6 credits. Prerequisite: Permission of instructor. Regional and specialized anatomy of the human body taught by laboratory dissection, conferences, and demonstrations. May be repeated with change of content up to a maximum of 9 credits.

MED 690 TUMOR BIOLOGY
4 credits. Pathobiology, biochemistry, and molecular biology of neoplasia; viral and chemical carcinogenesis; immunology and therapy of cancer in man and animals.

MED 691 IMMUNOPATHOLOGY
3 credits. Abnormalities and diseases with immunological basis or component. Clinical and experimental specimens for analysis by modern immunological techniques.

MED 692 EXPERIMENTAL TUMOR BIOLOGY
3 credits. Prerequisite: MED 690 or consent of staff. The development of laboratory skills and fundamental techniques in the study of various phenomena in tumor biology. Students will work in direct association with members of the MED 690 staff.

MED 693 IMMUNOBIOLOGY
5 credits. Biological aspects of the defense systems, specific and nonspecific, cellular and humoral, amplification systems involving immune interactions; normal and abnormal conditions and sequellae, pathologic aspects of immunologic phenomena; phylogenetic and developmental aspects of immunity.

MED 694 IMMUNOBIOLOGY LABORATORY
3 credits. Prerequisite: Consent of staff. Corequisite: MED 693. Project oriented. Laboratory skills and techniques in immunobiology. Each student or small group of students will work in close association with a faculty member.

MED 695 ADVANCES IN CELLULAR AND MOLECULAR BIOLOGY I
2 credits. Identical with BLY 602. The relationships between cell structure and function: 1) organization of chromosomes, RNA synthesis, and translation of the genetic code into functional entities; 2) organization of cellular membranes; 3) ultrastructure, function and biosynthesis of sub-cellular organelles; 4) regulatory mechanisms of the cell; correlation of *in vitro* and *in vivo* experiments.

MED 696 ADVANCES IN CELLULAR AND MOLECULAR BIOLOGY II
2 credits. Identical with BLY 603. Prerequisite: MED 695. The relationship between cell structure and function: 1) organization of chromosomes, RNA synthesis, and translation of the genetic code into functional entities; 2) organization of cellular membranes; 3) ultrastructure, function and biosynthesis of sub-cellular organelles; 4) regulatory mechanisms of the cell; correlation of *in vitro* and *in vivo* experiments.

PHARMACOLOGY & THERAPEUTICS

Students entering the course of study for the degree of Ph.D. in Medical Sciences with a major in Pharmacology & Therapeutics should present undergraduate course credits in chemistry, including quantitative analytical, organic and physical chemistry; elementary physics and biology, and mathematics through the calculus. Otherwise well-qualified students with certain deficiencies in preparation may be allowed to make these up during the first year of graduate study. In addition to elementary and advanced study in pharmacology, candidates will pursue courses in biochemistry, physiology, and other medical sciences as determined by consultation with their advisory committees.

MED 670 INTRODUCTION TO PHARMACOLOGY
5 credits. Prerequisites: elementary courses in biochemistry and physiology. An overview of the entire field of pharmacology as the study of the interactions between living systems and foreign chemicals. Intended to prepare majors for advanced courses or to familiarize non-majors with the area.

MED 671 THEORETICAL PHARMACOLOGY
5 credits. Prerequisites: CY 342. Physical, physiochemical, and mathematical aspects of pharmacology, including the theory of drug-receptor complexes, transport and distribution kinetics and equilibria, and the kinetics of enzyme inhibition by drugs.

MED 672 CHEMICAL PHARMACOLOGY
5 credits. Chemical aspects of several special areas of modern pharmacology, such as metabolism of foreign compounds, structure-activity relationships, the biochemistry of drug activity, etc.

MED 673 RECENT ADVANCES IN PHARMACOLOGY
5 credits. Advanced study of several special areas of modern pharmacology in which recent significant advances have been made.

MED 674 SEMINAR IN PHARMACOLOGY
1 credit. Research reports and discussions of current literature by graduate students, by faculty, and invited speakers.

MED 701 RESEARCH METHODS IN PHARMACOLOGY I
1 credit. Readings, discussions, and practical experience with modern research methods, both instrumental and biological, used in pharmacology.

MED 702 RESEARCH METHODS IN PHARMACOLOGY II
1 credit. Continuation of MED 701.

MED 703 TOPICS IN PHARMACOLOGY
0 to 4 credits. Seminars, informal conferences, and/or laboratory work in the use of drugs in biochemical and physiological investigations. May be repeated with change of content up to a maximum of 12 credits.

PHYSIOLOGY

Prerequisites: Undergraduate majors that are appropriate foundations for the study of physiology are: biology, chemistry, engineering, mathematics, or physics. The following courses are especially useful as background for the study of physiology: general biology, vertebrate biology, general chemistry, analytical chemistry, organic chemistry, physical chemistry, general physics, calculus, and statistics. Students usually find it necessary to remedy deficiencies in their backgrounds by taking a few undergraduate courses after admission to Graduate School.

Course requirements: Most students will be advised to take the following, unless equivalent courses have been taken elsewhere: MED 503, 520, 521, 534, BCH 601, 602, 603, and 605. Additional courses will be elected from those listed below and from those offered by other departments. A minor field of study is not required but may be elected in another department of the College of Medicine such as Neuroscience or Immunology and Medical Microbiology, or elsewhere in the University in such departments as Biochemistry, Physics, Psychology, or Zoology.

Dissertation: Research for the dissertation may be carried out in any of a number of areas of physiology including neurophysiology, endocrinology, respiration, circulation, physiology of muscle, environmental physiology, comparative physiology, and neonatal physiology.

MED 619 PHYSIOLOGY OF RESPIRATION
3 credits. Gas exchange in lungs and tissues. Ventilatory mechanics. Respiratory functions of bodily fluids. Physiological regulations. Comparative physiology of respiratory mechanisms.

MED 620 PHYSIOLOGY OF THE CIRCULATION OF BLOOD
3 credits. Physiology of the component parts of the circulation relation of structures and function emphasis on control mechanisms.

MED 621 RENAL PHYSIOLOGY
3 credits. Comparative physiological aspects of renal structure and function are covered in seminars.

MED 622 PHYSIOLOGY OF THE CENTRAL NERVOUS SYSTEM
3 credits. Special and current problems in brain and spinal cord function will be covered in seminars.

MED 623 NEUROPHYSIOLOGY
3 credits. Physiology of nerve and muscle, central nervous systems, and the special senses: Comparative aspects of the subject will be emphasized.

MED 625 BODY TEMPERATURE REGULATION
3 credits. Neural and endocrine aspects of temperature regulation, hypo- and hyperthermia, adaption to cold and heat, and hibernation will be covered. Comparative physiology of temperature regulations will be stressed.

MED 626 RECENT ADVANCES IN PHYSIOLOGY
3 credits. Content varies from year to year but covers recent advances in physiology. May be repeated with change of content up to a maximum of 15 credits.

MED 627 RESEARCH METHODS IN PHYSIOLOGY
2 to 6 credits. Maximum 9 credits. The special needs of each student will be met by conferences and laboratory work.

MED 628 SEMINAR IN PHYSIOLOGY
1 credit.

MED. 629 NEONATAL PHYSIOLOGY
3 credits. Physiological regulations in newborn mammals.

MED 636 A SURVEY OF SENSORY SYSTEMS
4 credits. Identical with PSY 623. Prerequisite: MED 623 or PSY 600. Theories and data on human sensory reception and encoding. Audition, vision, and chemical and cutaneous senses.

MED 637 SEMINAR ON VISION
4 credits. Identical with PSY 629. Prerequisite: MED 623 or PSY 600. Selected current research and theory in visual function.

MED 638 PHYSIOLOGY OF THE MAMMALIAN THYROID GLAND
3 credits. Production, secretion, control and function of the thyroid hormones will be covered; interaction with other hormones will be stressed.

RADIOLOGY

The Department offers a program leading to the M.S. degree in radiation biophysics (Radiological Sciences). Prerequisites: The basic requirement for admission to the graduate program is a bachelor's degree in an approved program in mathematics, engineering, or the physical or biological sciences. The following courses are considered especially useful as background for the study in the Radiological Sciences: general chemistry, general and modern physics, statistics, general biology, and organic chemistry. Calculus is highly recommended. If the student has not already taken PS 460, BLY 565, NES 540, or MED or EGC 508, he will be expected to take these courses early in his program.

Course requirements: In addition to those listed above, most students will be required to take MED 680, MED 682, MED 684, and MED 689. MED 699 is required for all students majoring in radiation biophysics.

Thesis: Satisfactory completion of a thesis based on research is required for an M.S. degree in radiation biophysics.

MED 680 RADIOLOGICAL PHYSICS
4 credits. X-ray generators including high-energy electron accelerators and interaction of electromagnetic radiation with matter relative to medical radiology.

MED 681 HEALTH PHYSICS
4 credits. Prerequisites: MED 508 and NES 540 or consent of instructor. Techniques of hazard evaluation and radiation control; monitoring methods; survey techniques; biological sampling; instrument calibration; exposure standards and radiation protection regulation; and on-site radiation safety surveys and evaluation.

MED 682 INSTRUMENT AND DOSIMETRY IN RADIOLOGY
4 credits. The electronics of diagnostic and therapeutic X-ray units; image amplifying tubes; video equipment in diagnostic radiology; dosimetry instrumentation including ionization chambers, semi-conductors, and luminescent devices; measurement in terms of roentgens; measurement of absorbed radiation energy; and calculation of internal dose from implanted sources and radiation beams.

MED 683 RADIOACTIVE TRACER INSTRUMENTATION AND METHODOLOGY
4 credits. Prerequisite: BLY 565. Analytical use of radioisotopes and activation analysis; preamplifiers, linear amplifiers, scalers, single and multichannel analyzers in gamma ray spectrometry; beta and gamma ray liquid scintillation detectors; tracer experiments, sample preparation, data analysis and efficiency calculations.

MED 684 RADIATION EFFECTS ON HUMANS
4 credits. Prerequisite: MED 680. Somatic and genetic radiation effects; acute and chronic radiation exposure; pathology; psychological and epidemiological aspects; fundamentals of the application of radiation and treatment of disease.

MED 685 COMPUTER APPLICATIONS IN MEDICINE
4 credits. Corequisite: FORTRAN programming course. Review of programming fundamentals (including use of computer at the Computing Center, and remote terminal usage) medical problems, data preparation and representation, simulation, information retrieval, problems in radiation biophysics with special emphasis on radiation treatment planning.

MED 686 NUCLEAR MEDICINE PROCEDURES
4 credits. Prerequisite: MED 688 and consent of instructor. Application of radioactive materials for diagnosis in medicine; *in vitro* and *in vivo* procedures such as hematological procedures, thyroid function tests, organ imaging, and dynamic function studies; internal dosimetry; radiopharmaceutical techniques.

MED 687 PROBLEMS IN RADIATION BIOPHYSICS
1-3 credits. Selected topics dealing with radiation physics and radiation biology. May be repeated with change of content up to a maximum of 6 credits.

MED 688 NUCLEAR MEDICINE INSTRUMENTATION
4 credits. Prerequisite: NES 540 and consent of instructor. Review of basic detection systems; theory and evaluation of instruments used in nuclear medicine; includes scintillation probes, scanners, imaging cameras, whole body counters, collimators, and data handling devices.

MED 689 SEMINAR IN RADIOLOGICAL SCIENCES
0-1 credit. Required of graduate students in radiation biophysics; open to others by permission of the department. Discussion in radiological health administration, radiation epidemiology, and research. May be repeated with change of content up to a maximum of 4 credits.

HERBERT E. KAUFMAN, M.D.
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JOSEPH E. JOHNSON, M.D.
Associate Dean for Academic Studies

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WILLIAMS, CLYDE M., M.D.
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WOODWARD, EDWARD R., M.D.
Chairman, Department of Surgery

College of Medicine Executive Committee, February 25, 1972.

Left to Right: Dr. Owen Rennert, Dr. Clyde Williams, Dr. Robert Williams, Dr. Edward Woodward, Dr. Emanuel Suter, Dr. Joseph Johnson, Mr. James McLean, Dr. Leighton Cluff, Dr. Arthur Otis, Dr. Frederick King, Dr. Parker Small, Dr. Harry Prystowsky, Dr. Thomas Maren, Dr. Richard Reynolds, Dr. Peter Cerutti, Dr. Gerold Schiebler, Dr. Herbert Kaufman, Dr. Richard Smith, and Dr. Jerome Modell.

FACULTY

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BRUMBELOW, CONCEPCION, M.D.,
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Professor and Chairman

MUNSON, EDWIN S., M.D., (Univ. of Tennessee)
Professor

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VON MERING, O. OTTO, Ph. D., (Harvard)
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Preceptor/Starke

BERMAN, DONALD A., M.D., (Tulane University)
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BORLAND, JAMES L., M.D., (Johns Hopkins)
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Preceptor/Eau Gallie

HANDWERKER, JOHN V., JR., M.D., (Univ. of Tenn.)
Preceptor/Key Biscayne

HARRELL, H. L., M.D., (Vanderbilt Univ.)
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KNOTTS, BEN F., JR., M.D., (Univ. of Maryland)
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McNAUGHTON, THOMAS M., M.D., (Indiana Univ.)
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METZGER, CLYDE, M.D., (Univ. of Penn.)
Preceptor/Steubenville, Ohio

MORGAN, MICHAEL G., M.D., (Univ. of Tenn.)
Preceptor/Lehigh Acres

NIKOLAUS, DONALD, M.D., (Ohio State Univ.)
Preceptor/Dunedin

O'BRIEN, KEVIN, M.D., (Tulane University)
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OPER, ARNOLD, M.D., (SUNY Downstate)
Preceptor/Opa Locka

OTT, FRANKLIN B., M.D., (Loyola University)
Preceptor/Pompano Beach

PORTELA, RAUL, M.D., (University of Havana)
Preceptor/Hialeah

PRINCE, JOHN T., M.D., (Ohio State Univ.)
Preceptor/Jupiter

QUEHL, THOMAS M., M.D., (Tulane University)
Preceptor/St. Petersburg

RICHMAN, WILLIAM, M.D., (Temple University)
Preceptor/Hollywood

ROBINSON, NEAL A., M.D., (Univ. of Arkansas)
Preceptor/Eustis

SALTZMAN, EDWARD J., M.D., (Jefferson Univ.)
Preceptor/Hollywood

*These preceptors provide students an exposure to private practice within the community.

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Preceptor/St. Petersburg

SKINNER, RICHARD G., JR., M.D., (Emory Univ.)
Preceptor/Jacksonville

SMEDLEY, J. T., M.D., (Univ. of Tennessee)
Preceptor/Coconut Grove

SNODGRASS, RICHARD W., M.D., (U. of Rochester)
Preceptor/Daytona Beach

SOURBEER, JOHN N., M.D., (Jefferson Univ.)
Preceptor/Largo

STEELE, HUGH G., M.D., (Tulane University)
Preceptor/Ft. Lauderdale

THORNTON, FRANK J., M.D., (Emory Univ.)
Preceptor/Haines City

TRUMP, RICHARD C., M.D., (Ohio State Univ.)
Preceptor/Madeira Beach

ULSETH, ROBERT N., M.D., (Univ. of Illinois)
Preceptor/West Palm Beach

VON THRON, JOSEPH C., M.D., (Ohio State Univ.)
Preceptor/Cocoa Beach

WEAVER, THOMAS, M.D., (Med. Col. of Georgia)
Preceptor/Clermont

WILLIAMS, WARREN L., M.D., (Univ. of Colorado)
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*PAWLINGER, DAVID F., M.D., (Univ. of Florida)
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SCHIENEMAN, BRUCE O., M.D., (Ohio State Univ.)
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de la TORRE, ANGEL, M.D., (Univ. of Havana)
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WILKERSON, RUTH, M.D., (Med. Col. of Va.)
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DEAL, WILLIAM B., M.D., (Univ. of N. C.)
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Associate Dean College of Medicine

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Clinical Instructor/Gainesville

NEWMAN, MELVIN, M.D., (Boston University)
Clinical Assistant Professor/JHEP/Jacksonville

PRATHER, E. CHARLTON, M.D., (Bowman Gray)
Clinical Associate Professor/JHEP/Jacksonville

SALES, LOUIS M., M.D., (Boston University)
Clinical Associate Professor/JHEP/Jacksonville

STEIN, GERALD H., M.D., (Univ. of Penn.)
Clinical Assistant Professor/Gainesville

STORCH, SIDNEY, M.D., (Univ. of Brussels)
Clinical Associate Professor/JHEP/Jacksonville

Neurology

GONYEA, EDWARD F., M.D., (Georgetown Univ.)
Assistant Professor/VA

*GREER, MELVIN, M.D., (New York Univ.)
Professor and Chief

HEILMAN, KENNETH M., M.D., (Univ. of Va.)
Assistant Professor

VROOM, FREDERIC Q., M.D., (Univ. of Alabama)
Assistant Professor

WILDER, B. JOE, M.D., (Duke University)
Associate Professor/VA

Volunteer Faculty

CUNNINGHAM, RICHARD W., M.D., (Univ. of Fla.)
Clinical Instructor/Gainesville

GIPSON, AMOS C., M.D., (Vanderbilt Univ.)
Clinical Instructor/Tampa

HARRISON, THOMAS H., M.D., (Duke University)
Clinical Instructor/Tampa

HUDGINS, ROBERT L., M.D., (Med. Col. of Va.)
Clinical Assistant Professor/JHEP/Jacksonville

LYNDE, ROBERT, M.D., (Med. Col. of Virginia)
Clinical Instructor/JHEP/Jacksonville

QUICK, DONALD T., M.D., (Case Western Reserve)
Clinical Associate Professor/Gainesville

Pulmonary Disease

BLOCK, A. JAY, M.D., (Johns Hopkins)
Assistant Professor/VA

*SWENSON, EDWARD W., M.D., (Univ. of Nebraska)
Associate Professor and Chief

TUCKER, WILLIAM B., M.D., (Univ. of Chicago)
Professor/VA

ZAUNER, CHRISTIAN W., Ph.D., (Southern Ill.)
Associate Professor and
Associate Professor of Physical Education

Volunteer Faculty

ANDERSON, AUGUSTUS E., M.D., (Tulane Univ.)
Clinical Instructor/JHEP/Jacksonville

ARMSTRONG, ALLAN L., M.D., (Univ. of Virginia)
Clinical Instructor/Tampa

AZCUY, ARNOLD, M.D., (Univ. of Havana)
Clinical Assistant Professor/JHEP/Jacksonville

HENDERSON, FRANK W., M.D., (Jefferson)
Clinical Assistant Professor/Lake City

MORERA, JULIO E., M.D., (University of Miami)
Clinical Instructor/Lake City

NEDER, GEORGE A., JR., M.D., (Emory Univ.)
Clinical Instructor/Orlando

Renal

*CADE, J. ROBERT, M.D., (University of Texas)
Professor and Chief

SCHLEIN, EDWARD, M.D., (Univ. of Florida)
Assistant Professor

Volunteer Faculty

GREGORY, LOUIS F., M.D., (Univ. of Miss.)
Clinical Instructor/JHEP/Jacksonville

HAYES, CHARLES P., M.D., (Duke University)
Clinical Associate Professor/JHEP/Jacksonville

NEUROSCIENCE

BERNSTEIN, JERALD J., Ph.D., (Univ. of Mich.)
Associate Professor and
Associate Professor in Ophthalmology

ISAACSON, ROBERT L., Ph.D., (Univ. of Michigan)
Professor and Professor in Psychology

KING, FREDERICK A., Ph.D., (Johns Hopkins)
Professor and Chairman, Professor in Psychology

KING, ROBERT L., Ph.D., (Johns Hopkins)
Assistant Professor

LARKIN, ANN R. S., Ph.D., (Univ. of Colorado)
Assistant Professor/VA

LUTTGE, WILLIAM G., Ph.D., (Univ. of Cal., Irvine)
Assistant Professor

MAHAN, PARKER E., D.D.S., Ph.D.,
(Emory, University of Rochester)
Professor, and Professor and
Chairman, Department of Dental Sciences

MUNSON, JOHN B., Ph.D., (Univ. of Rochester)
Assistant Professor

SUZUKI, HOWARD K., Ph.D., (Tulane University)
Professor, and Professor and Acting Dean,
College of Health Related Professions

VAN HARTESVELDT, CAROL J., Ph.D.,
(University of Rochester)
Assistant Professor and
Assistant Professor in Psychology

VIERCK, CHARLES J., JR., Ph.D., (Univ. of Florida)
Assistant Professor and
Assistant Professor in Psychology

WALKER, DON W., Ph.D., (Texas Christian Univ.)
Assistant Professor and Research Psychologist/VA

ZORNETZER, STEVEN F., Ph.D., (Univ. of Cal., Irvine)
Assistant Professor

OBSTETRICS AND GYNECOLOGY

ABRAMS, ROBERT M., Ph.D., D.D.S., (Univ. of Penn.)
Assistant Professor

BARD, DAVID S., M.D., (Col. Physicians, Surgeons)
Assistant Professor

BARRON, DONALD H., Ph.D., (Yale University)
Professor

BURGESS, PAUL, L.Th., M.S.P.H., (Univ. of N.C.)
Assistant Professor

CATON, DONALD, M.D., (Columbia Univ.)
Assistant Professor and
Assistant Professor in Anesthesiology

COTTER, JULIAN R., M.D., (Johns Hopkins)
Assistant Professor

CRISS, WAYNE, Ph.D., (Univ. of Florida)
Assistant Professor

DALY, JAMES W., M.D., (Loyola University)
Associate Professor

FONTANA, JOHN, JR., M.D., (Georgetown Univ.)
Chief Resident and Instructor

GILIBERT, JOSE E., M.D., (Nat. Univ. Mexico City)
Assistant Professor

HARDMAN, ALVIN A., M.D., (Univ. of Florida)
Chief Resident and Instructor

HELD, BEREL, M.D., (Tulane University)
Assistant Professor

HILL, HUGH M., M.D., (Johns Hopkins)
Professor and Assistant Dean for
Student Affairs

KALRA, S. P., Ph.D., (University of Delhi)
Assistant Professor

McKERNS, KENNETH W., Ph.D., (McGill Univ.)
Professor

MENDENHALL, HIRAM, M.D., (Univ. of Cal.)
Associate Professor

MOJADIDI, QUDRATULLAH, M.D., (Kabul Univ.)
Assistant Professor/JHEP

MONIF, GILLES R. G., M.D., (Boston Univ.)
Associate Professor

PRYSTOWSKY, HARRY, M.D., (Med. Col. of S.C.)
Professor and Chairman

SORENBERG, RICHARD, M.D., (Duke Univ.)
Chief Resident and Instructor

THOMPSON, ROBERT J., M.D., (Wayne State Univ.)
Associate Professor and JHEP Chairman

WEEKS, JOHN W., M.D., (Duke University)
Assistant Professor

Volunteer Faculty

ALLGOOD, JACKSON L., JR., M.D., (Med. Col. of Ga.)
Clinical Associate Professor/JHEP/Jacksonville

BANCROFT, JOE W., JR., M.D., (Univ. of Miami)
Clinical Instructor/JHEP/Jacksonville

CARSON, DORIS M., M.D., (Ohio State Univ.)
Clinical Associate Professor/JHEP/Jacksonville

DENHAM, SAM WESLEY, M.D., (Emory Univ.)
Clinical Associate Professor/JHEP/Jacksonville

DUCKETT, HOWARD C., JR., M.D., (Duke Univ.)
Clinical Associate Professor/JHEP/Jacksonville

GOSS, ALBERT S., JR., M.D., (Emory Univ.)
Clinical Associate Professor/JHEP/Jacksonville

HAGEL, DONALD R., M.D., (Univ. of Nebraska)
Clinical Associate Professor/JHEP/Jacksonville

HARRELL, JAMES E., M.D., (Univ. of Florida)
Clinical Associate/Stuart

JONAS, A. GARLAND, JR., M.D., (Vanderbilt Univ.)
Clinical Associate Professor/JHEP/Jacksonville

LONG, FRANK G., M.D., (Temple University)
Clinical Associate Professor/JHEP/Jacksonville

MANTOOTH, MURRAY K., M.D., (Univ. of Tenn.)
Clinical Assistant Professor/JHEP/Jacksonville

McCRANIE, PETER A., M.D., (Emory Univ.)
Clinical Associate Professor/JHEP/Jacksonville

McCURDY, CHARLES M., M.D., (Univ. of Florida)
Clinical Associate Professor/St. Petersburg

McDOWELL, RICHARD W., M.D., (Univ. of Penn.)
Clinical Associate Professor/JHEP/Jacksonville

McNEIL, JAMES P., M.D., (Univ. of Virginia)
Clinical Associate Professor/JHEP/Jacksonville

McNEILL, H. WYATT, M.D., (Univ. of Miami)
Clinical Instructor/JHEP/Jacksonville

MEIN, ROBERT M., M.D., (Univ. of Louisville)
Clinical Associate Professor/JHEP/Jacksonville

MENZIES, DONALD S., JR., M.D., (Univ. of N. C.)
Clinical Associate Professor/Gainesville

MESSER, HENRY H., M.D., (Univ. of Florida)
Clinical Associate Professor/Tallahassee

MORRISON, SIDNEY E., M.D., (Duke Univ.)
Clinical Associate Professor/Hollywood

MULLEE, ROBERT G., M.D., (SUNY Upstate)
Clinical Associate Professor/Gainesville

OBERDORFER, PAUL W., M.D., (Tulane Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

PHELAN, WILLIAM J., M.D., (Georgetown Univ.)
Clinical Associate Professor/JHEP/Jacksonville

ROSIN, ALEXANDER P., M.D., (Tulane University)
Clinical Assistant Professor/JHEP/Jacksonville

SUTER, MAX, M.D., (Tulane University)
Clinical Professor/JHEP/Jacksonville

TURNER, LEONIDAS M., JR., M.D., (Univ. of Miami)
Clinical Associate Professor/Bradenton

ZEIGLER, VERNON P., M.D., (Univ. of Miami)
Clinical Instructor/JHEP/Jacksonville

OPHTHALMOLOGY

ADAMS, CALVIN K., Ph.D., (Kansas State Univ.)
Assistant Professor and
Assistant Professor in Psychology

CENTIFANTO, YSOLINA M., Ph.D., (Univ. of Fla.)
Assistant Professor and Assistant Professor in
Immunology and Medical Microbiology

DAWSON, WILLIAM W., Ph.D., (Fla. State Univ.)
Professor and Professor in
Psychology and Physiology

FERRER, JORGE A., M.D., (Montevideo Col. of Med.)
Assistant Professor and
Assistant Professor in Pediatrics

FITZGERALD, CONSTANCE K., M.D., (Wash. Univ.)
Assistant Professor

GASSET, ANTONIO R., M.D., (Boston Univ.)
Assistant Professor

KAUFMAN, HERBERT E., M.D., (Duke University)
Professor and Chairman and Acting Dean

POLACK, FRANK M., M.D., (San Marcos Univ.)
Associate Professor

RAMER, RICHARD, Ph.D., (Stevens Inst. of Tech.)
Assistant Professor and
Assistant Professor in Biochemistry

RUBIN, MELVIN L., M.D., (Univ. of Cal.)
Professor

WORTHEN, DAVID M., M.D., (Univ. of Minnesota)
Assistant Professor and
Chief of Ophthalmology/VA

Volunteer Faculty

ANDERSON, WILLIAM H., M.D., (Univ. of Chicago)
Clinical Associate/Ocala

BOYD, CHARLES W., M.D., (Tulane University)
Clinical Associate/Jacksonville

CASEY, ERNEST R., M.D., (George Wash. Univ.)
Clinical Associate/Gainesville

CLOWER, JAMES W., M.D., (Univ. of Georgia)
Clinical Associate/Daytona Beach

EDWARDS, THOMAS S., M.D., (Tulane Univ.)
Clinical Associate/Jacksonville

GIBSON, WILLIAM J., M.D., (Univ. of Chicago)
Clinical Associate/St. Augustine

GILLS, JAMES P., M.D., (Duke University)
Clinical Associate/Tarpon Springs

HOUSTON, WILLIAM H., M.D., (Univ. of Georgia)
Clinical Associate/Jacksonville

LUCAS, HOWARD C., M.D., (Cornell Univ.)
Clinical Associate/Winter Haven

McCRORY, CHARLES F., M.D., (Univ. of Tenn.)
Clinical Associate/Gainesville

PINKOSON, CHARLES, M.D., (Tulane University)
Clinical Associate/Gainesville

ROBBINS, JAMES E., M.D., (Emory University)
Clinical Associate/Gainesville

VAN ARNAM, CARL E., M.D., (Univ. of Oregon)
Clinical Associate/Gainesville

ZUBERO, JOSEPH L., M.D., (Univ. of Zaragoza)
Clinical Associate/Jacksonville

PATHOLOGY

ADAMS, W. ROBERT, M.D., (Yale University)
Professor

BYVOET, PAUL, M.D., Ph.D., (University of Leiden)
Associate Professor

COLLINS, GEORGE H., M.D., (Univ. of Vermont)
Professor

CRANDALL, CATHERINE A., Ph.D., (Purdue Univ.)
Associate in Pathology and Instructor

DONNELLY, WILLIAM HENRY, M.D., (U. of Ottawa)
Assistant Professor

ECHEVARRIA, RENE, M.D., (Havana Univ.)
Associate Professor

FELDHERR, CARL, Ph.D., (Univ. of Penn.)
Associate Professor

FISCHLSCHWEIGER, WERNER, Ph.D., (Univ. of Graz)
Associate Professor,
Department of Basic Dental Sciences

GEBHARDT, BRYAN M., Ph.D., (Tulane Univ.)
Assistant Professor

HACKETT, RAYMOND L., M.D., (Univ. of Vermont)
Associate Professor

HOOD, C. IAN, M.B., Ch.D., (Liverpool)
Associate Professor

KALLENBACH, ERNST A., Ph.D., (McGill Univ.)
Assistant Professor

KLEIN, PAUL A., Ph.D., (Univ. of Florida)
Assistant Professor

LAITE, MELVILLE B., M.S., (Univ. of Tenn.)
Associate in Pathology and Instructor

LARKIN, LYNN H., Ph.D., (Univ. of Colorado)
Assistant Professor

NORMANN, SIGURD J., M.D., Ph.D., (Univ. of Wash.)
Assistant Professor

PIERSON, K. KENDALL, M.D., (N.Y. State Univ.)
Professor

POTTER, JAMES M., M.D., (Univ. of Florida)
Assistant Professor

ROSS, MICHAEL H., Ph.D., (New York Univ.)
Professor

SANDERS, WILLIE J., B.S., (Univ. of Florida)
Instructor

SAVORY, JOHN, Ph.D., (Univ. of Durham)
Associate Professor

SCHIMPFF, ROBERT, M.D., (Univ. of Florida)
Research Instructor

SHAW, LYNN FLORY, Ph.D., (Cambridge Univ.)
Assistant Professor

SMITH, RICHARD T., M.D., (Tulane University)
Professor and Chairman

STANLEY, HAROLD R., D.D.S.,
(Baltimore Col., Dental Surgery)
Professor and Chairman, Division of Oral Pathology

TEAGUE, PERRY O., Ph.D., (Univ. of Oklahoma)
Assistant Professor

WOODARD, JAMES C., D.V.M., Ph.D., (Univ. of Ill.)
Associate Professor

Volunteer Faculty

AREAN, V. M., M.D., (Central Univ. of Spain)
Clinical Professor/St. Petersburg

RHATIGAN, RONALD M., M.D., (Univ. of Iowa)
Clinical Assistant Professor/JHEP/Jacksonville

PEDIATRICS

ALTEMEIER, WILLIAM A., M.D., (Vanderbilt)
Assistant Professor and Assistant Professor in
Immunology and Medical Microbiology

AYOUB, ELIA M., M.D., (American Univ. of Beirut)
Professor

BLOOM, GERALD E., M.D., (Univ. of Maryland)
Associate Professor

DEBUSK, FRANKLIN L., M.D., (Johns Hopkins)
Associate Professor and
Director of Pediatric Clinic

EITZMAN, DONALD V., M.D., (Univ. of Iowa)
Professor

FRIAS, JAIME L., M.D., (Univ. of Concepcion)
Assistant Professor

GESSNER, IRA H., M.D., (Univ. of Vermont)
Professor and Chairman,
Medical Selection Committee

JULIUS, RICHARD L., M.D., (Univ. of Florida)
Instructor

LEVIN, SIDNEY, M.D., (Baylor University)
Professor/JHEP Chairman

MILLER, BILLIE LYNN, M.D., (Univ. of Chicago)
Assistant Professor

MILLER, ROBERT, M.D., (Univ. of Florida)
Assistant Professor/JHEP

PEREZ, GUILLERMO J., M.D., (Univ. of Paris)
University Physician and
Assistant Professor in Pediatrics

RENNERT, OWEN M., M.D., (Univ. of Chicago)
Professor and Professor in
Biochemistry and Professor in Neurosciences

RICHARD, GEORGE A., M.D., (Univ. of Pittsburgh)
Assistant Professor

ROSENBLOOM, ARLAN L., M.D., (Univ. of Wis.)
Associate Professor

ROSS, JOHN J., M.D., (Harvard University)
Associate Professor

ROTH, S. S., M.D., (Case Western Reserve)
Instructor, Pediatric Clinic

RUSHTON, F. EDWARDS, M.D., (Univ. of Virginia)
Assistant Professor

SCHIEBLER, GEROLD L., M.D., Ph.D., (Harvard Univ.)
Professor and Chairman

SCHULKIND, MARTIN L., M.D., (Univ. of Chicago)
Assistant Professor

SEASHORE, MARGRETTA, M.D., (Yale University)
Assistant Professor

SOLER, GLADYS P., M.D., (Univ. of Havana)
Instructor/JHEP

VAN MIEROP, L. H. S., M.D., (State Univ. of Leiden)
Professor and Professor in Pathology

VICTORICA, BENJAMIN E., M.D., (Univ. of Argentina)
Assistant Professor

WEISS, CHARLES F., M.D., (Vanderbilt Univ.)
Associate Professor and Assistant Professor in
Pharmacology and Associate Professor in Pharmacy

WITTIG, HEINZ, M.D., (University of Munich)
Associate Professor

Volunteer Faculty

BAKER, ROY M., M.D., (Emory University)
Clinical Assistant Professor/JHEP/Jacksonville

BEAM, LEWIS R., JR., M.D., (Vanderbilt Univ.)
Clinical Assistant Professor/Winter Park

BELL, WILLIAM R., M.D., (Duke University)
Clinical Associate Professor/Pensacola

BOOTHBY, RICHARD J., M.D., (State Univ. of N.Y.)
Clinical Assistant Professor/JHEP/Jacksonville

BOWERS, JOHN ALFRED, M.D., (Med. Col. of Ga.)
Clinical Assistant Professor/JHEP/Jacksonville

BRILL, THOMAS M., M.D., (Univ. of Michigan)
Clinical Associate Professor/Gainesville

BUTSCHER, WILLIAM C., M.D., (Jefferson Med. Col.)
Clinical Assistant Professor/JHEP/Jacksonville

CARITHERS, CORNELIA M., M.D., (Cornell Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

CARITHERS, HUGH A., M.D., (Emory University)
Clinical Associate Professor/JHEP/Jacksonville

CIMINO, LOUIS E., M.D., (St. Louis Univ.)
Clinical Assistant Professor/Tampa

CLEMENT, STEPHEN P., M.D., (Harvard Univ.)
Clinical Assistant Professor/Sarasota

CRANE, JAMES D., M.D., (Duke University)
Clinical Assistant Professor/JHEP/Jacksonville

DAVID, JOSEPH K., M.D., (Duke Univ.)
Clinical Associate Professor/JHEP/Jacksonville

DELL, GEORGE A., M.D., (St. Louis Univ.)
Clinical Associate Professor/Gainesville

EISEN, SAUL, M.D., (Emory University)
Clinical Assistant Professor/JHEP/Jacksonville

FLEET, JOEL, M.D., (Tulane University)
Clinical Assistant Professor/JHEP/Jacksonville

FRAME, EUGENE M., M.D., (Temple University)
Clinical Assistant Professor/JHEP/Jacksonville

FRASER, DONALD J., M.D., (Hahnemann Med. Col.)
Clinical Associate Professor/Orlando

GINTER, MYRNA B., M.D., (Univ. of Havana)
Clinical Assistant Professor/JHEP/Jacksonville

GYLAND, STEPHEN P., M.D., (Vanderbilt Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

HADLEY, WILLIAM P., M.D., (Duke University)
Clinical Assistant Professor/Gainesville

HANSBERRY, WILLIAM E., M.D., (Univ. of Miami)
Clinical Assistant Professor/JHEP/Jacksonville

IVEY, JOHN F., M.D., (Baylor University)
Clinical Assistant Professor/JHEP/Jacksonville

KELLY, WALTER C., M.D., (Temple Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

KINGSLEY, MOSS J., M.D., (Med. Col. of Georgia)
Clinical Assistant Professor/Jacksonville

KOKOMOOR, MARVIN L., M.D., (Univ. of Michigan)
Clinical Assistant Professor/Gainesville

LANE, JOHN G., JR., M.D., (George Wash. Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

LANIER, JAMES C., M.D., (Vanderbilt Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

LaSPADA, ANTHONY, M.D., (Univ. of Bologna)
Clinical Assistant Professor/JHEP/Jacksonville

McCAIN, JAMES R., M.D., (Univ. of Tenn.)
Clinical Assistant Professor/JHEP/Jacksonville

McINTOSH, CHARLES B., M.D., (Meharry Med. Col.)
Clinical Assistant Professor/JHEP/Jacksonville

MARRIOTT, HENRY J., M.D., (Oxford Univ.)
Clinical Professor/St. Petersburg

MOORE, MARCUS M., M.D., (Duke University)
Clinical Assistant Professor/Ft. Myers

MORGAN, WILLIAM C., M.D., (Univ. of Florida)
Clinical Assistant Professor/Sarasota

MOSS, JAMES K., M.D., (Med. Col. of Georgia)
Clinical Associate Professor/JHEP/Jacksonville

PARKHURST, ROBERT D., M.D., (Univ. of Mich.)
Clinical Associate Professor/Valdosta, Georgia

PERLMAN, MORTON A., M.D., (Univ. of Miami)
Clinical Assistant Professor/JHEP/Jacksonville

PRICE, MORRIS A., M.D., (Emory University)
Clinical Assistant Professor/JHEP/Jacksonville

RITROSKY, JOHN, JR., M.D., (SUNY Upstate)
Clinical Assistant Professor/Ft. Myers

SANDERS, SANDY K., M.D., (Univ. of Florida)
Clinical Assistant Professor/Gainesville

SCHAFER, WALTER L., M.D., (Ohio State Univ.)
Clinical Assistant Professor/St. Petersburg

SHASHY, ROBERT A., M.D., (Med. Col. of S.C.)
Clinical Assistant Professor/JHEP/Jacksonville

SKINNER, RICHARD G., JR., M.D., (Emory Univ.)
Clinical Professor/JHEP/Jacksonville

SIERS, MARY R., M.D., (Vanderbilt Univ.)
Clinical Instructor/Ocala

THRELKEL, ROBERT, M.D., (Duke University)
Clinical Instructor/JHEP/Jacksonville

TOWNSEND, JAMES J., M.D., (Duke Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

WALKER, JAMES W., M.D., (Univ. of Tenn.)
Clinical Assistant Professor/JHEP/Jacksonville

WEIL, NATHAN, JR., M.D., (Tulane Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

WHITWORTH, JAY M., M.D., (Indiana Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

WOLFSON, SORRELL L., M.D., (Vanderbilt Univ.)
Clinical Assistant Professor/Tampa

WUBBENA, PAUL F., JR., M.D., (Emory Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

PHARMACOLOGY & THERAPEUTICS

CHIOU, GEORGE C., Ph.D., (Vanderbilt Univ.)
Assistant Professor

CRAMER, JOHN W., Ph.D., (Univ. of Wisconsin)
Associate Professor

FOX, LAURETTA E., Ph.D., (Univ. of Ill.)
Associate Professor

GARG, LAL C., Ph.D., (Univ. of Florida)
Instructor

KEM, WILLIAM R., Ph.D., (Univ. of Ill.)
Assistant Professor

LEIBMAN, KENNETH C., Ph.D., (New York Univ.)
Professor

MAREN, THOMAS H., M.D., (Johns Hopkins)
Professor and Chairman

MUTHER, THOMAS F., Ph.D., (Univ. of Leeds)
Assistant Professor

OPPELT, W. WALTER, M.D., (Harvard Univ.)
Professor, Director of Clinical
Research Center and Professor in Medicine

ROLF, LESTER L., JR., Ph.D., (Texas A&M Univ.)
Instructor

SILVERMAN, DAVID N., Ph.D., (Columbia Univ.)
Assistant Professor

TRAVIS, DAVID M., M.D., (Vanderbilt Univ.)
Professor and Professor in Medicine

VOGH, BETTY P., Ph.D., (Univ. of Florida)
Assistant Professor

WEINSTEIN, IRA, Ph.D., (George Wash. Univ.)
Associate Professor

PHYSIOLOGY

CASSIN, SIDNEY, Ph.D., (Univ. of Texas)
Professor

FREGLY, MELVIN J., Ph.D., (Rochester Univ.)
Professor

JAEGER, MARC J., M.D., (University of Bern)
Associate Professor and
Associate Professor of Dentistry

OTIS, ARTHUR B., Ph.D., (Brown University)
Professor and Chairman

STAINSBY, WENDELL N., Sc.D., (Johns Hopkins)
Professor

PSYCHIATRY

ADAMS, PAUL L., M.D., (Columbia Univ.)
Professor in Psychiatry and
Professor in Pediatrics

AVERY, BYLLYE Y., M.Ed., (Univ. of Florida)
Associate in Psychiatry and
Instructor in Personnel Services

BARINGER, GEORGE R., M.D., (Univ. of Miss.)
Assistant Professor

BARNARD, GEORGE W., M.D., (Univ. of N.C.)
Associate Professor

CAHOON, STUART N., M.D., (Temple University)
Associate Professor

CARRERA, FRANK, M.D., (Emory University)
Associate Professor

CHUDNOVSKY, NATALIO, M.D., (U. of Buenos Aires)
Assistant Professor

COLLINS, DOROTHY E., M.A., (Univ. of Chicago)
Assistant Professor of Social Work in Psychiatry

CRIST, JOAN L., M.S.W., (Florida State Univ.)
Instructor of Social Work in Psychiatry

DANOFF, JASCHA, M.D., (Univ. of Toronto)
Assistant Professor in Psychiatry and
Assistant Professor in Pediatrics

FABRICK, ARTHUR L., M.S.W., (Univ. of N. C.)
Associate Psychiatric Social Worker

GAGLIANO, THEODORE, M.D., (Columbia Univ.)
Assistant Professor

GERVAIS, ROBERT H., M.D., (SUNY Downstate)
Assistant Professor

GORDON, RICHARD E., M.D., Ph.D., (Univ. of Mich.)
Associate Professor

GOULD, SHARON LEE, M.S.W., (Florida State Univ.)
Instructor of Social Work in Psychiatry

GROSS, SARA, M.S.S., (Bryn Mawr)
Associate in Psychiatry (Social Work)

HAMPTON, ARCHIBALD S., M.D., (Emory Univ.)
Assistant Professor

HO, NANCY L., M.S.W., (McGill Univ.)
Instructor of Social Work in Psychiatry

HURSCH, CAROLYN J., Ph.D., (Univ. of Colorado)
Assistant Professor

JOFFE, SARETTA H., M.S., (Columbia Univ.)
Instructor of Social Work in Psychiatry

KARACAN, ISMET, M.D., D.Sc., (Univ. of Istanbul)
Professor

KEHOE, MICHAEL J., M.D., (St. Bartholomew's U.)
Professor and Professor in Medicine

KRAMER, SOL, Ph.D., (Univ. of Illinois)
Professor of Biological Sciences in Psychiatry

LANGEE, HARVEY R., M.D., (Stanford University)
Assistant Professor

LAZARUS, SHIELA J., M.S.W., (West Va. Univ.)
Instructor of Social Work in Psychiatry

LEVY, JUDITH M., Ph.D., (Univ. of Florida)
Assistant Professor and
Assistant Professor in Clinical Psychology

LUND, DONALD A., Ph.D., (Yale University)
Assistant Professor

LYONS, HENRY R., M.D., (Georgetown Univ.)
Associate Professor/VA and
Chief of Psychiatric Service/VA

MASKIN, MEYER H., M.D., (Wayne University)
Professor

McDONALD, NANCY F., M.S.W., (Univ. of N. C.)
Associate Professor of Social Work in Psychiatry

MOST, BERTHA M., M.D., (Univ. of Pittsburgh)
Assistant Professor/VA

MUNIZ, CARLOS, M.D., (Univ. of Havana)
Assistant Professor

NEWMAN, E. GUSTAVE, M.D., (Duke University)
Associate Professor

NUERNBERGER, LOUIS G., M.D., (Univ. of Okla.)
Assistant Professor

O'CONNELL, VINCENT F., Ph.D., (Adelphi Univ.)
Associate Professor of Psychology in Psychiatry

OGBURN, BENJAMIN R., M.D., (Univ. of Virginia)
Assistant Professor

PLUTZKY, MAXIMO, M.D., (Univ. of Havana)
Associate Professor

RICE, WARREN J., M.D., (Case Western Reserve)
Assistant Professor and
Assistant Professor in Clinical Psychology

RUFFIN, WILLIAM C., JR., M.D., (Univ. of N. C.)
Professor

SCHWAB, JOHN J., M.D., (Univ. of Louisville)
Professor and Professor in Medicine

SCHWARZ, GEORGE C., M.D., (Duke Univ.)
Assistant Professor and
Associate Professor in Pediatrics

SMITH, JACK R., Ph.D., (Univ. of Southern Cal.)
Professor of Biomedical Engineering in Psychiatry

STEIN, JOEL M., M.D., (Univ. of Florida)
Assistant Professor and
Assistant Professor in Pediatrics

STEPHENSON, F. DOUG, A.M., (Univ. of Chicago)
Intructor of Social Work in Psychiatry

de la TORRE, JOSE I., M.D., (Univ. of Honduras)
University Psychiatrist and
Assistant Professor in Psychiatry

WARHEIT, GEORGE J., Ph.D., (Ohio State Univ.)
Assistant Professor of Sociology in Psychiatry

WILLIAMS, ROBERT L., M.D., (Univ. of Albany)
Professor and Chairman

Volunteer Faculty

ADAIR, CLARK, M.D., (Dalhousie University)
Clinical Assistant Professor/Arcadia

BELL, ROBERT E., JR., M.D., (Bowman Gray)
Clinical Assistant Professor/Columbia, S. C.

BERNSTEIN, STUART, M.D., (George Wash. Univ.)
Clinical Instructor/Orlando

BLANK, HENRY S., M.D., J.D., (Geo. Wash., U. of Fla.)
Clinical Instructor/Gainesville

BLOOD, ARTHUR, M.D., (Emory University)
Clinical Instructor/Orlando

BURKE, FENTON, M.D., (National Univ. of Ireland)
Clinical Associate Professor/Macclenney

CAMPBELL, LINDSEY, M.D., (Bowman Gray)
Clinical Assistant Professor/Jacksonville

CATANZARO, RONALD, M.D., (Washington Univ.)
Clinical Associate Professor/West Palm Beach

COGGINS, DEBORAH R., M.D., (Duke Univ.)
Clinical Assistant Professor/Gainesville

DAVIS, JOSH D., M.D., (Vanderbilt Univ.)
Clinical Assistant Professor/Gainesville

DEAN, STANLEY, M.D., (Univ. of Michigan)
Clinical Professor/Miami

EMERSON, RICHARD P., M.D., (Harvard Univ.)
Clinical Assistant Professor/Coral Gables

ESTES, MARION, M.D., (Med. Col. of Georgia)
Clinical Instructor/Daytona Beach

FORIZS, LORANT, M.D., (Univ. of Szeged)
Clinical Associate Professor/Tarpon Springs

HENDERSON, BROOKS, M.D., (Univ. of Penn.)
Clinical Assistant Professor/Ocala

HIBBS, SAMUEL G., M.D., (Univ. of Pittsburgh)
Clinical Professor/Tampa

HOLTZMAN, SAUL, M.D., (Boston University)
Clinical Assistant Professor/St. Petersburg

JARRETT, PAUL S., M.D., (Indiana Univ.)
Clinical Associate Professor/Coral Gables

KING, R. TAYLOR, M.D., (Vanderbilt Univ.)
Child Psychiatrist/Jacksonville

KOENIG, ALFRED D., M.D., (Univ. of Lausanne)
Clinical Assistant Professor/St. Petersburg

KOLIN, IRV, M.D., (SUNY, Buffalo)
Clinical Instructor/Orlando

LARSON, ARTHUR, M.D., (Northwestern)
Clinical Professor/Tallahassee

MEADOWS, RICHARD L., M.D., (Univ. of Penn.)
Clinical Assistant Professor/Tarpon Springs

MILLER, ERNEST C., M.D., (Tulane University)
Clinical Instructor/Jacksonville

NELSON, JOHN F., M.D., (University of Florida)
Clinical Instructor/Gainesville

REED, PHILIP B., M.D., (Indiana University)
Clinical Associate Professor/St. Petersburg

RIPPY, WILSON C., JR., M.D., (Emory Univ.)
Clinical Assistant Professor/Tampa

STEELE, ROBERT G., M.D., (Albany Med. College)
Clinical Assistant Professor/Sarasota

STIEFEL, JOHN R., M.D., (Emory University)
Clinical Assistant Professor/Gainesville

TINGLE, DAVID, M.D., (Univ. of Sheffield)
Clinical Instructor/Ft. Pierce

WARSON, SAMUEL, M.D., (McGill University)
Clinical Professor/Tampa

WELLBORN, WALTER H., M.D., (Emory University)
Clinical Assistant Professor/Tarpon Springs

WHITEHURST, W. LANEY, M.D., (Univ. of Tenn.)
Clinical Assistant Professor/Jacksonville

WILDER, LLOYD, M.D., (Loma Linda Univ.)
Clinical Instructor/Orlando

ZEITLER, ROBERT G., M.D., (Washington Univ.)
Clinical Assistant Professor/Tarpon Springs

RADIOLOGY

AGEE, O. FRANK, M.D., (Louisiana State Univ.)
Professor, Diagnostic Radiology

BILLEN, DANIEL, Ph.D., (Univ. of Tennessee)
Research Professor, Radiation Biology

BROOKEMAN, VALERIE A., Ph.D., (U. of St. Andrews)
Assistant Professor, Radiation Physics

BRUNO, FREDERICK P., M.S., (Univ. of Florida)
Research Instructor, Radiation Physics

CLORE, FORREST C., M.D., (Univ. of Michigan)
Assistant Professor and
Chief of Diagnostic Radiology

COLLETT, WILLIAM K., D.D.S., Sc.D., (U. of Pittsburgh)
Professor and Chairman of
Division of Radiology, College of Dentistry

COUCH, MARGARET W., Ph.D., (Univ. of Florida)
Research Assistant Professor, Chemistry

CROMROY, HARVEY L., Ph.D., (N.C. State)
Associate Professor,
Radiation Biology and Entomology

DELAND, FRANK H., M.D., (Univ. of Louisville)
Professor and Chief of Nuclear Medicine

DUNAVANT, BILLY G., Ph.D., (Purdue Univ.)
Associate Professor, Chief of Radiological Sciences
and Professor and Director of Nuclear Sciences Div.

DUNCAN, JAMES H., Ph.D., (Univ. of Colorado)
Assistant Professor and
Assistant Professor in Pharmacology

ELLIOTT, LARRY P., M.D., (Univ. of Tenn.)
Professor, Cardiovascular Radiology

FELMAN, ALVIN H., M.D., (Univ. of Cincinnati)
Associate Professor, Pediatric Radiology

GANO, OVID R., B.E.E., (Univ. of Florida)
Assistant Professor, Radiation Engineering

HAWKINS, IRVIN F., JR., M.D., (Univ. of Maryland)
Assistant Professor, Cardiovascular Radiology

HODGES, PAUL C., M.D., Ph.D., (Wash. U., U. of Wis.)
Visiting Professor, Diagnostic Radiology

KAUDE, JURI V., M.D., (University of Kiel)
Professor, Cardiovascular Radiology

KAVANAUGH, HOWARD V., M.S., (Univ. of Fla.)
Instructor, Radiation Physics

LORENZ, ERHARD, M.S., (Univ. of Rostock)
Instructor, Radiation Physics

MANS, RUSTY J., Ph.D., (Univ. of Florida)
Professor, Radiation Biology

MAUDERLI, WALTER, D.Sc., (Univ. of Zurich)
Professor, Radiation Physics

MILLION, RODNEY R., M.D., (Indiana Univ.)
Professor, Radiation Therapy

NORTHROP, MEAD F., M.D., (SUNY Upstate)
Assistant Professor, Radiation Therapy

ROESSLER, CHARLES E., Ph.D., (Univ. of Florida)
Assistant Professor, Radiological Sciences

SCOTT, KATHERINE N., Ph.D., (Univ. of Florida)
Research Assistant Professor, (Chemistry)/VA

TAYLOR, THOMAS L., M.D., (Cornell University)
Assistant Professor, Diagnostic Radiology

WILLIAMS, CLYDE M., M.D., Ph.D.,
(Baylor University, University of Oxford)
Professor and Chairman

Volunteer Faculty

WALKLETT, WILLIAM D., M.D., (Emory Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

SURGERY

General Surgery

COOPER, PHILIP, M.D., (Harvard University)
Professor

DRAGSTEDT, L. R., M.D., Ph.D., (Rush & U. of Chicago)
Research Professor and Professor in Physiology

FREEMAN, ELEANOR, R.N., (St. Vincent's Hosp.)
Instructor, Operating Room

LANDOR, JOHN H., M.D., (Univ. of Chicago)
Professor/VA

MACGREGOR, ALEXANDER, M.D.,
(University of St. Andrews)
Assistant Professor

PFAFF, WILLIAM W., M.D., (Buffalo Univ.)
Professor

STEPHENSON, SAM E., JR., M.D., (Vanderbilt)
Professor and JHEP Chairman

WEINSHELBAUM, EDWARD J., M.D., (U. of Chicago)
Assistant Professor and Chief of Surgery/VA

*WOODWARD, EDWARD R., M.D., (Univ. of Chicago)
Professor and Chairman, Chief of General Surgery

Volunteer Faculty

ATKINSON, SAMUEL C., M.D., (Tulane Univ.)
Clinical Instructor/JHEP/Jacksonville

BABERS, HENRY, JR., M.D., (Cornell Univ.)
Clinical Professor/Gainesville

BEGGS, JOHN H., M.D., (Univ. of Minn.)
Clinical Assistant Professor/Lake City

BENSON, J. ROBERT, M.D., (Washington Univ.)
Clinical Instructor/JHEP/Jacksonville

BLACK, BRUCE A., M.D., (Univ. of Florida)
Clinical Instructor/JHEP/Jacksonville

BOND, JAMES W., M.D., (Indiana Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

COLLINS, CLYDE M., M.D., (Med. Col. of Georgia)
Clinical Assistant Professor/JHEP/Jacksonville

DAY, SAMUEL M., M.D., (Washington Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

FECHTEL, ALBERT T., M.D., (Tulane University)
Clinical Instructor/JHEP/Jacksonville

FERGUSON, EMMET F., JR., M.D., (Med. Col. of Ga.)
Clinical Assistant Professor/JHEP/Jacksonville

HURLBUT, H. JOSEPH, M.D., (Emory University)
Clinical Assistant Professor/JHEP/Jacksonville

MOORE, WILLIAM R., M.D., (Emory Univ.)
Clinical Assistant Professor/Lake City

MOSELEY, THAD M., M.D., (Vanderbilt Univ.)
Clinical Professor/JHEP/Jacksonville

PHILLIPS, CURTIS M., M.D., (Med. Col. of Georgia)
Clinical Associate Professor/JHEP/Jacksonville

REINSTINE, HARRY W., JR., M.D., (Univ. of Va.)
Clinical Associate Professor/JHEP/Jacksonville

ROESCH, C. BURLING, M.D., (Cornell University)
Clinical Associate Professor/JHEP/Jacksonville

STILL, ROBERT H., M.D., (Med. Col. of Georgia)
Clinical Instructor/JHEP/Jacksonville

STUBBS, GEORGE M., M.D., (Duke University)
Clinical Assistant Professor/JHEP/Jacksonville

SUMNER, WILBUR C., M.D., (Med. Col. of Georgia)
Clinical Associate Professor/JHEP/Jacksonville

WILLIAMS, ROGER D., M.D., (Duke University)
Clinical Professor/Ft. Lauderdale

Neurological Surgery

*CAUTHEN, JOSEPH, M.D., (Duke University)
Assistant Professor and Acting Chief

GARCIA-BENGOCHEA, FRANCISCO, M.D., (Tulane)
Professor

WHITE, LOWELL E., JR., M.D., (Univ. of Washington)
Professor

Volunteer Faculty

FREEMAN, JAMES V., M.D., (Univ. of Tenn.)
Clinical Assistant Professor/Gainesville

FURLOW, LEONARD R., SR., M.D., (Emory Univ.)
Clinical Professor/Crystal River

HUDSON, CALVIN H., M.D., (Univ. of Tennessee)
Clinical Assistant Professor/JHEP/Jacksonville

MAULDIN, RONALD L., M.D., (Univ. of N.C.)
Clinical Assistant Professor/Gainesville

MUSELLA, ROSARIO, M.D., (University of Naples)
Clinical Assistant Professor/Bay Pines

Orthopedics

ALLEN, WILLIAM C., M.D., (Univ. of Chicago)
Associate Professor

DEDO, RICHARD G., M.D., (Northwestern)
Assistant Professor and JHEP Chairman

*ENNEKING, WILLIAM F., M.D., (Univ. of Wisconsin)
Professor and Chief

HOGSHEAD, HOWARD P., M.D., (Univ. of Iowa)
Associate Professor

PASCHALL, HOMER A., M.D., (Bowman Gray)
Assistant Professor

PIOTROWSKI, GEORGE, Ph.D., (Case West. Reserve)
Assistant Professor and
Assistant Professor in Mechanical Engineering

Volunteer Faculty

ALEXANDER, LEON H., M.D., (Med. Col. of Va.)
Clinical Instructor/Lake City

BRADY, LOUIS P., M.D., (Emory University)
Clinical Assistant Professor/Orlando

CROFT, CARL L., M.D., (Duke University)
Clinical Instructor/Winter Park

FRY, RICHARD M., M.D., (Temple University)
Clinical Assistant Professor/Gainesville

GILMAN, STEVE H., M.D., (Univ. of Florida)
Clinical Instructor/Ocala

HOCKER, JOHN T., M.D., (Univ. of Kansas)
Clinical Assistant Professor/JHEP/Jacksonville

HOOVER, ROY, M.D., (Univ. of Virginia)
Clinical Assistant Professor/Tallahassee

McCONNELL, BRIGHT, JR., M.D., (Med. Col. of Ga.)
Clinical Instructor/Winter Park

MEAD, CHARLES A., JR., M.D., (Geo. Wash. Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

MOORE, THOMAS H., JR., M.D., (Univ. of Florida)
Clinical Instructor/Gainesville

NIXON, JOSEPH J., M.D., (Med. Col. of Georgia)
Clinical Instructor/Winter Park

SPIVEY, JAMES N., M.D., (Med. Col. of S.C.)
Clinical Instructor/Orlando

STANFORD, THOMAS A., M.D., (Loma Linda Univ.)
Clinical Instructor/Orlando

WALLACE, PAUL, M.D., (Univ. of Chicago)
Clinical Assistant Professor/St. Petersburg

Otolaryngology

ATTIA, ELHAMY L., M.D., (Univ. of Alexandria)
Instructor

BLACK, FRANKLIN O., M.D., (Univ. of Missouri)
Associate Professor

KONISHI, TERUZO, M.D., Ph.D., (Kyoto Univ.)
Associate Research Professor and
Associate Research Professor in Physiology

*SINGLETON, GEORGE T., M.D., (Baylor Univ.)
Professor and Chief, Chief of Staff/Shands

SMITH, RAYMOND O., M.D., (Oklahoma Univ.)
Assistant Professor

Volunteer Faculty

BITZER, WEST, M.D., (Univ. of Virginia)
Clinical Assistant Professor/Ocala

FARRIOR, RICHARD T., M.D., (Duke Univ.)
Clinical Professor/Tampa

GARLINGTON, JAMES C., M.D., (Yale Univ.)
Clinical Assistant Professor/Gainesville

TAYLOR, G. DEKLE, M.D., (Univ. of Michigan)
Clinical Professor/JHEP/Jacksonville

Pediatric Surgery

SEASHORE, JOHN H., M.D., (Yale University)
Instructor

TALBERT, JAMES L., M.D., (Vanderbilt Univ.)
*Professor and Chief, Professor in Pediatrics

Volunteer Faculty

SACHS, BARRY F., M.D., (New York Univ.)
Clinical Assistant Professor/JHEP/Jacksonville

WEBB, H. WARNER, M.D., (Emory University)
Clinical Assistant Professor/JHEP/Jacksonville

WILKINSON, ALBERT H., JR., M.D., (Jefferson Univ.)
Clinical Associate Professor/JHEP/Jacksonville

Plastic and Reconstructive Surgery

ACKELL, EDMUND F., D.M.D., M.D., (U. of Chicago)
Vice President for Health Affairs and
Professor of Oral Surgery

*BINGHAM, HAL G., M.D., (University of Kansas)
Professor and Chief

FURLOW, LEONARD T., M.D., (Washington Univ.)
Associate Professor

McCRAW, JOHN B., M.D., (Univ. of Missouri)
Instructor

Volunteer Faculty

COKER, JOHN L., M.D., (Univ. of Penn.)
Clinical Assistant Professor of
Dental Surgery (Plastic)/Gainesville

DUSHOFF, IRA M., M.D., (Univ. of Penn.)
Clinical Assistant Professor/JHEP/Jacksonville

MORGAN, BERNARD L., M.D., (London Univ.)
Clinical Assistant Professor and
JHEP Chairman/JHEP/Jacksonville

Thoracic and Cardiovascular Surgery

BORUCHOW, IRWIN C., M.D., (Georgetown Univ.)
Assistant Professor

*DAICOFF, GEORGE R., M.D., (Univ. of Indiana)
Professor and Chief

GOFF, DALEY, M.D., (University of N.C.)
Assistant Professor/JHEP

RAYL, JOHN E., M.D., (Univ. of Louisville)
Associate Professor/LCVA

Volunteer Faculty

COUSAR, JAMES, M.D., (Johns Hopkins)
Clinical Assistant Professor/JHEP/Jacksonville

DAVIS, JAMES, M.D., (Harvard University)
Clinical Assistant Professor/JHEP/Jacksonville

SNYDER, HAROLD E., M.D., (Vanderbilt Univ.)
Clinical Instructor/JHEP/Jacksonville

VONTZ, FREDERICK K., M.D.,
(Medical Academy of Dusseldorf)
Clinical Assistant Professor/JHEP/Jacksonville

Urology

*DRYLIE, DAVID M., M.D., (Bowman Gray)
Associate Professor and Chief

FINLAYSON, BIRDWELL, M.D., (Univ. of Chicago)
Associate Professor

MILLER, GEORGE H., M.D., (Penn. State Univ.)
Professor and Chief of Staff/VA

WALKER, R. DIXON, III, M.D., (Univ. of Miami)
Assistant Professor

*Division Chiefs

Volunteer Faculty

ACKERMAN, EDWARD, M.D., (Wayne State Univ.)
Clinical Associate Professor/Winter Park

JABLONSKI, DONALD V., M.D., (Wayne State Univ.)
Clinical Associate Professor/Winter Park

VAN NORTWICK, WILLIAM A., M.D., (Vanderbilt)
Clinical Professor and
JHEP Chairman/JHEP/Jacksonville

POSTDOCTORAL FELLOWS, RESIDENTS, AND HOUSESTAFF

ANESTHESIOLOGY

AUSINSCH, BAIBA, M.D., (Univ. of Florida)
Intern

BEEBE, RICHARD J., M.D., (Ohio State Univ.)
First Year Resident

CHAPMAN, ROY L., JR., M.D., (Univ. of Tenn.)
Second Year Resident

DOWNS, JOHN B., M.D., (Univ. of Florida)
Research Trainee

DRURY, WILEY L., M.D., (Med. Col. of Georgia)
First Year Resident

FESSENDEN, STEPHEN F., M.D., (Univ. of Fla.)
Intern

HAMILTON, SANDRA D., M.D., (Univ. of Florida)
First Year Resident

HARDY, CHARLES A., M.D., (Univ. of Missouri)
Research Fellow

KNIPPEL, THOMAS C., M.D., (Univ. of Miami)
Second Year Resident

LOBER, DAVID A., M.D., (SUNY Downstate)
First Year Resident

LORA, PEDRO M., M.D., (Univ. of Havana)
Second Year Resident

McGINN, LARRY D., M.D., (Kansas University)
First Year Resident

MORALES, MICHAEL R., M.D., (Univ. of Havana)
First Year Resident

RACKSTEIN, ANDREW D., M.D., (Univ. of Chicago)
Second Year Resident

SAGA, SEGUNDINA A., M.D., (U. of Philippines)
Clinical and Research Fellow

SEAGER, ORIN A., M.D., (Univ. of Penn.)
First Year Resident

STILL, JAMES A., JR., M.D., (Univ. of Miami)
First Year Resident

THAM, MIN KWAN, Ph.D., (Univ. of Florida)
Postdoctoral Fellow

TUCKER, WILLIAM K., M.D., (Duke University)
First Year Resident

BIOCHEMISTRY

BAIG, MANSOOR, Ph.D., (SUNY)
Postdoctoral Fellow

DUNLAP, BRIAN E., Ph.D., (Michigan State)
Postdoctoral Associate

JERNIGAN, HOWARD M., Ph.D., (Univ. of N.C.)
Postdoctoral Fellow

JOHNS, PHILIP T., Ph.D., (Univ. of North Dakota)
Postdoctoral Fellow

McMACKEN, ROGER L., JR., Ph.D., (Univ. of Wis.)
Postdoctoral Fellow

ROTI ROTI, JOSEPH L., Ph.D., (Univ. of Rochester)
Postdoctoral Associate

SEDOR, FRANK A., Ph.D., (Univ. of Florida)
Postdoctoral Fellow

IMMUNOLOGY AND MEDICAL MICROBIOLOGY

BEASLEY, WILLIAM A., Ph.D., (Univ. of Georgia)
Postdoctoral Fellow

DODGE, WILLIAM H., Ph.D., (Univ. of Miss.)
Postdoctoral Fellow

GORMUS, BOBBY JOE, Ph.D., (Duke University)
Postdoctoral Fellow

KOZEK, WIESLAW, Ph.D., (Tulane University)
Postdoctoral Fellow

SCALES, ROY W., Ph.D., (Univ. of Mississippi)
Postdoctoral Fellow

MEDICINE

BEHRINGER, FREDERICK R., JR., M.D., (Duke)
Intern

BLUTH, STEVEN A., M.D., (Chicago Med. School)
Intern

BRAUNINGER, ANDREA L., M.D., (Univ. of S. Cal.)
Intern

BRODIE, BRUCE R., M.D., (Washington Univ.)
First Year Resident

BUFFINGTON, GARY K., M.D., (Jefferson Med. Col.)
Intern

CASTLE, JAMES R., M.D., (Univ. of Virginia)
Second Year Resident

CHAFETZ, NEIL I., M.D., (University of N.C.)
Intern

CHERRY, WILLIAM C., JR., M.D., (Emory)
Clinical Fellow in Cardiology

COHEN, KENNETH L., M.D., (Univ. of Illinois)
Intern

COYLE, JOHN M., M.D., (Yale University)
Third Year Resident

CURRY, RUPERT C., JR., M.D., (Univ. of Florida)
Second Year Resident

DAVIES, BERNARD F., M.D., (Univ. of Florida)
Intern

DEAN, ROBERT C., M.D., (University of Florida)
Intern

DEFORD, JAMES W., M.D., (University of Florida)
Clinical Fellow in Gastroenterology

DOBBINS, PATRICK K., M.D., (Univ. of Florida)
Clinical Fellow in Pulmonary Diseases

ETTINGER, MARK P., M.D., (Univ. of Florida)
Intern

FEUSSNER, GEORGE G., M.D., (Univ. of Pittsburgh)
First Year Resident

FINLAYSON, GORDON C., M.D., (Univ. of Florida)
Second Year Resident

FISKE, ROBERT A., D.V.M., (Texas A&M)
Clinical Fellow in Comparative Medicine

FOSCUE, HENRY A., M.D., (Duke University)
Clinical Fellow in Pulmonary Diseases

FULLER, EARL W., JR., M.D., (Med. Col. of Va.)
Clinical Fellow in Cardiology

GRACIAA, GUIDO F., M.D., (A.A.A. Balli, Havana)
First Year Resident

GRAYBEAL, ROBERT T., M.D., (Harvard Univ.)
Second Year Resident

GREENBERG, ROBERT A., M.D., (Univ. of Florida)
Second Year Resident

GREENFIELD, DREW S., M.D., (University of Miami)
Intern

GUY, CLIFFORD R., M.D., (N.J. Col. of Med.)
Clinical Fellow in Cardiology

HINKES, CHARLES, M.D., (Univ. of Pittsburgh)
Clinical Fellow in Hematology

HOWLETT, STEPHEN A., M.D., (Johns Hopkins)
Second Year Resident

JACOBSON, JAY A., M.D., (University of Florida)
Intern

KOLTS, BYRON E., M.D., (Univ. of Rochester)
Clinical Fellow in Gastroenterology

KRAMER, DEAN C., M.D., (Univ. of Missouri)
Clinical Fellow in Gastroenterology

LAHAM, MICHEL M., M.D., (Univ. of Florida)
Intern

LONGLEY, SELDEN, III, M.D., (Vanderbilt)
Clinical Fellow in Infectious Diseases

McMAHAN, THOMAS K., M.D., (Washington Univ.)
First Year Resident

MADRY, ROBERT W., M.D., (University of N.C.)
Second Year Resident

MAEDER, MICHAEL C., M.D., (Ohio State Univ.)
Intern

MAHONEY, JAMES J., M.D., (Univ. of Florida)
Intern

MALZONE, WILLIAM F., M.D., (Univ. of Florida)
Third Year Resident

MANDELL, VALERIE S., M.D., (Univ. of Florida)
Intern

MATHERS, DANIEL H., JR., M.D., (Univ. of Florida)
Clinical Fellow in Cardiology

MAUCERI, ARTHUR A., M.D., (Georgetown Univ.)
Clinical Fellow in Infectious Diseases

MENGEL, MARVIN C., M.D., (Johns Hopkins)
Second Year Resident

MIALE, THOMAS D., M.D., (Univ. of Pittsburgh)
Clinical Fellow in Hematology

MOUAT, WILLIAM D., JR., M.D., (U. of Pittsburgh)
Intern

NEGIN, HARLEY B., M.D., (Ohio State Univ.)
Intern

NELSON, EDWARD W., JR., M.D., (Tulane Univ.)
Third Year Resident

OLSEN, GERALD N., M.D., (Univ. of Miss.)
Clinical Fellow in Pulmonary Disease

PARKER, JAMES L., M.D., (Univ. of Miss.)
Intern

POLLICINA, FEDERICO, M.D., (Univ. de los Andes)
Clinical Fellow in Cardiology

POWNER, DAVID J., M.D., (University of Florida)
First Year Resident

PUCKETT, THOMAS G., M.D., (Univ. of Miss.)
Intern

RUBEN, STUART J., M.D., (Ohio State Univ.)
Intern

SCHERER, GEORGE F., M.D., (Univ. of Florida)
Intern

SCHIMP, ROBERT G., D.V.M., (Auburn Univ.)
Clinical Fellow in Comparative Medicine

SERRANO, EARNEST E., M.D., (Univ. of Florida)
First Year Resident

SIEGER, BARRY E., M.D., (Johns Hopkins)
Clinical Fellow in Infectious Diseases

SLATON, ROBERT C., M.D., (Univ. of Florida)
First Year Resident

SNYDER, GREGORY K., Ph.D., (UCLA)
Clinical Fellow in Cardiology

STONE, MELVIN, M.D., (Ohio State Univ.)
First Year Resident

SURRATT, JOHN P., M.D., (University of N.C.)
Intern

THOMAS, BERNARD S., JR., M.D., (Duke University)
Intern

THORNTON, ROBERT S., M.D., (Med. Col. of Ga.)
First Year Resident

TRITEL, HARVEY, M.D., (Hahnemann Med. Col.)
Clinical Fellow in Cardiology

TUCEK, PAUL C., D.V.M., (Univ. of Illinois)
Clinical Fellow in Comparative Medicine

VON MAUR, RICHARD K., M.D., (Ohio State Univ.)
Second Year Resident

WARD, JONATHAN M., M.D., (Duke University)
Intern

WATSON, ROBERT T., M.D., (Univ. of Florida)
Second Year Resident

WEISS, CHARLES J., M.D., (Chicago Med. School)
First Year Resident

WILCOXEN, JOSEPH K., M.D., (Univ. of Illinois)
Third Year Resident

WOODWARD, ROGER S., M.D., (Geo. Wash. Univ.)
Intern

WYNNE, JAMES W., M.D., (Cornell University)
Second Year Resident

ZELLNER, STEPHEN R., M.D., (Univ. of Florida)
Second Year Resident

NEUROSCIENCE

LINEBERRY, CHARLES G., Ph.D., (Univ. of Delaware)
Postdoctoral Fellow

CHRONISTER, ROBERT B., Ph.D., (Univ. of Vermont)
Postdoctoral Fellow

OBSTETRICS & GYNECOLOGY

CARNEY, FRANCIS E., M.D., (Univ. of Florida)
Second Year Resident

FERRELL, ROBERT E., JR., M.D., (Univ. of Florida)
Second Year Resident

HALL, DOUGLAS C., M.D., (Univ. of Florida)
Second Year Resident

HUDDLESTON, JOHN F., M.D., (Duke University)
Third Year Resident

LEACH, WILLIAM W., M.D., (Univ. of Florida)
First Year Resident

MESSINA, ANTHONY M., M.D., (Univ. of Florida)
First Year Resident

PRADHAN, TAPAS, Ph.D., (Univ. of Calcutta)
Postdoctoral Associate

SCHOENFELD, ORENE V., M.D., (Univ. of Florida)
Third Year Resident

SHEVACH, ALLEN B., M.D., (SUNY Upstate)
Third Year Resident

WENTZ, PETER, Ph.D., (University of Florida)
Postdoctoral Associate

WILLISON, FRANCES C., M.D., (Med. Col. of Ga.)
First Year Resident

OPHTHALMOLOGY

BIRNDORF, LAWRENCE A., M.D., (Univ. of Mich.)
Second Year Resident

BRAUNINGER, GORDON E., M.D., (Columbia Univ.)
Second Year Resident

BRENNAN, ELAINE F., M.D., (Med. Col. of Ala.)
First Year Resident

BRIGHTBILL, FREDERICK S., M.D., (Univ. of Illinois)
Clinical Fellow

BUNN, JACK C., M.D., (Harvard University)
Third Year Resident

COBB, WILLIAM T., M.D., (Univ. of Florida)
Third Year Resident

COX, CHARLES E., M.D., (University of Florida)
First Year Resident

FINE, STUART L., M.D., (University of Maryland)
Third Year Resident

FRASER, LEWIS K., M.D., (Johns Hopkins)
Second Year Resident

GRINBERG, MARC A., M.D., (Cornell Univ.)
Second Year Resident

HORWITZ, JEFFREY A., M.D., (Univ. of Cincinnati)
Third Year Resident

KARLSBERG, ROBERT C., M.D., (Univ. of Michigan)
Fourth Year Resident

LEVENSON, JEREMY E., M.D., (U. of Cal., San Fran.)
Corneal Fellow

PATROWICZ, TULLY C., M.D., (University of Miami)
Third Year Resident

RIEGEL, BYRON W., M.D., (Cornell University)
Fourth Year Resident

SHAW, EDWARD L., M.D., (University of Bologna)
First Year Resident

WIND, CHIEL A., M.D., (Univ. of Jerusalem)
Fourth Year Resident

ZIMMERMAN, THOMAS J., M.D., (Univ. of Illinois)
First Year Resident

PATHOLOGY

BARD, EVA S., M.D., (Univ. of Erlangen)
First Year Resident

BURCHARDT, HANS, M.S., (Univ. of Florida)
Predoctoral Fellow

DEIN, ROBERT, M.D., (Univ. of Florida)
Intern

DEMIAN, SABA, M.D., (Cairo University)
First Year Resident

FORBES, JAMES T., Ph.D., (Univ. of the South)
Postdoctoral Fellow

GUDAT, J. C., Ph.D., (Cornell University)
Postdoctoral Fellow

HARRISON, CHANTAL R., M.D., (Univ. of Florida)
Intern

KILLINGSWORTH, LAWRENCE M., B.S., (Emory)
Predoctoral Fellow

KUFER, GABRIELLE E., M.D., (Univ. of Erlangen)
First Year Resident

McGEE, JAMES H., D.V.M., (Oklahoma State Univ.)
Postdoctoral Fellow

OVERFIELD, J. C., Ph.D., (Univ. of Florida)
Postdoctoral Fellow

PACHCIARZ, JUDITH, Ph.D., (St. Louis Univ.)
Postdoctoral Fellow

SAFFOS, ROSILIE S., M.D., (Univ. of Florida)
Chief Resident

SCHIMPFF, ROBERT, M.D., (Univ. of Florida)
Postdoctoral Fellow

SPANIER, SUZANNE S., M.D., (Univ. of Florida)
Third Year Resident

TURNER, BENJAMIN, M.D., (Med. Col. of Ga.)
Intern

PEDIATRICS

AYUT, D., M.D., (Chulalongkorn Med. School)
Clinical Fellow

BLOOM, FREDERICK L., M.D., (Med. Col. of Wis.)
Intern

BURTON, EDWARD M., M.D., (Univ. of Florida)
Intern

COHEN, DENNIS A., M.D., (Ohio State Univ.)
First Year Resident

COOK, TERRANCE J., M.D., (Loyola Univ.)
Clinical Fellow

CORDELL, G. DYKES, M.D., (Vanderbilt)
First Year Resident

DAVIS, JEFFREY P., M.D., (Univ. of Chicago)
Intern

DELLINGER, CHARLES T., M.D., (Univ. of Florida)
Intern

DUNCAN, RAYMOND L., M.D., (Univ. of Minn.)
First Year Resident

FISER, PAUL M., M.D., (Univ. of Arkansas)
Intern

GARRISON, ROBERT D., M.D., (University of N.C.)
Clinical Fellow

JACKSON, ROBERT, M.D., (Univ. of Penn.)
Clinical Fellow

KIRKPATRICK, BARRY, M.D., (Med. Col. of Va.)
Clinical Fellow

KOHLER, WILLIAM C., M.D., (Univ. of Florida)
Clinical Fellow

LEIFER, KENT N., M.D., (Univ. of Illinois)
Intern

MacQUEEN, DONALD M., M.D., (Univ. of N.C.)
Clinical Fellow

McLAUGHLIN, EDWARD T., M.D., (Univ. of Fla.)
Intern

McWILLIAMS, NEIL E., M.D., (Univ. of Fla.)
Second Year Resident

MEADOR, PHILIP D., JR., M.D., (Univ. of N.C.)
Intern

MORGAN, JOHN R., M.D., (Vanderbilt Univ.)
Clinical Fellow

NETZLOFF, MICHAEL L., M.D., (Univ. of Florida)
Clinical Fellow

O'CONNER, SUSAN M., M.D., (Univ. of Florida)
First Year Resident

PASCOE, JOHN M., M.D., (Univ. of Michigan)
Intern

PEELE, THOMAS C., JR., M.D., (Med. Col. of S.C.)
Second Year Resident

PENROD, JAMES C., M.D., (Univ. of Florida)
First Year Resident

POWERS, DAVID W., M.D., (Univ. of Florida)
Clinical Fellow

RHOADES, ROBERT B., M.D., (Univ. of Florida)
First Year Resident

SHULMAN, STANFORD T., M.D., (Univ. of Chicago)
Clinical Fellow

ST. PETERY, JULIA R., M.D., (Univ. of Florida)
Second Year Resident

ST. PETERY, LOUIS B., JR., M.D., (Univ. of Fla.)
Clinical Fellow

TIWARY, C. M., M.D., (King George Med. Col.)
Clinical Fellow

WILLIAMS, ROBERT L., M.D., (Univ. of Florida)
Intern

ZAVELSON, THOMAS M., M.D., (Duke Univ.)
Chief Resident

PHARMACOLOGY & THERAPEUTICS

GUY, CLIFFORD R., M.D., (N.J. Col. of Med.)
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McCULLOUGH, JERRY L., Ph.D., (Yale Univ.)
Postdoctoral Fellow

PHYSIOLOGY

LUTHERER, LORENZ O., Ph.D., (Univ. of Florida)
Postdoctoral Fellow

POSNER, PHILIP, Ph.D., (New York Univ.)
Postdoctoral Fellow

PSYCHIATRY

ATWOOD, SUE C., M.D., (Univ. of Tenn.)
Third Year Resident

BRANCIFORTE, ROBERTO, M.D., (Univ. of Cuyo)
Fifth Year Resident

CAMPBELL, DONALD R., M.D., (Univ. of Florida)
Third Year Resident

COURINGTON, FRED W., M.D., (Univ. of Florida)
First Year Resident

EVANS, HENRY C., M.D., (Vanderbilt Univ.)
Second Year Resident

FANNIN, WILLIAM R., M.D., (Univ. of Florida)
Third Year Resident

FLEMING, ARTHUR R., M.D., (Temple Univ.)
Third Year Resident

GILBERT, JAMES M., M.D., (Univ. of Okla.)
First Year Resident

GRAHAM, WILLIAM D., M.D., (Univ. of Miss.)
First Year Resident

HAYNES, KEITH E., M.D. (Indiana Univ.)
Second Year Resident

HENRY, BRUCE G., M.D., (Med. Col. of Va.)
First Year Resident

JENKINS, NEWELL D., M.D., (Univ. of Tenn.)
First Year Resident

MASCO, HOWARD L., M.D., (Univ. of Pittsburgh)
First Year Resident

MILLER, LLOYD R., M.D., (Univ. of Tenn.)
First Year Resident

MILNER, GILBERT C., M.D., (Univ. of Texas)
Third Year Resident

MOORE, ARDEAN C., M.D., (Univ. of Kentucky)
First Year Resident

MYINT, MURIEL M. M., M.D., (Inst. of Med., Burma)
First Year Resident

NIMS, PETER E., M.D., (Ohio State Univ.)
Third Year Resident

SPRINGER, PHILIP K., M.D., (Univ. of Miss.)
Second Year Resident

THAN, TIN MYO, M.D., (Inst. of Med., Burma)
First Year Resident

TWENTE, GEORGE E., M.D., (Univ. of Miss.)
First Year Resident

VALENTINE, EUGENE R., M.D., (Temple Univ.)
Fourth Year Resident

VERGARA, ALEJANDRO F., M.D., (Univ. of Madrid)
Third Year Resident

WAGEMAKER, HERBERT, M.D., (Hahnemann)
Third Year Resident

WHITE, ROWENA R., M.D., (Univ. of Miss.)
Second Year Resident

RADIOLOGY

ANDREWS, EDSON J., M.D., (Univ. of Florida)
Clinical Fellow

ATWOOD, J. WESLEY, M.D., (Univ. of Tenn.)
Third Year Resident

COLE, DAVID O., M.D., (Univ. of Miss.)
Third Year Resident

DEAL, PAMELA C., M.D., (Univ. of Florida)
Clinical Fellow

GOODNIGHT, THOMAS M., M.D., (Indiana Univ.)
First Year Resident

HERBERT, MARSHALL L., M.D., (Harvard Univ.)
First Year Resident

HOBGOOD, SHANNON R., M.D., (Univ. of Florida)
First Year Resident

HUDSON, TERRY M., M.D., (Duke University)
First Year Resident

JOSE, LEOPOLD C., M.D., (Univ. of Philippines)
First Year Resident

KELLEY, MICHAEL K., M.D., (Washington Univ.)
Second Year Resident

McCORD, DALE L., M.D., (Med. Col. of Georgia)
Second Year Resident

McNEELY, GWYN F., M.D., (University of N.C.)
First Year Resident

MAYO, MARVIN G., M.D., (Washington Univ.)
Third Year Resident

MELICHAR, FRANK A., M.D., (Univ. of Michigan)
First Year Resident

MORRIS, LEN W., M.D., (Washington Univ.)
Second Year Resident

PARSONS, ROBERT G., M.D., (Univ. of Florida)
Second Year Resident

PHILLIPS, THOMAS W., M.D., (Med. Col. of Ga.)
Second Year Resident

PICKENS, WILLIAM S., M.D., (Univ. of Arkansas)
Second Year Resident

PORTER, ALLEN H., M.D., (Univ. of Florida)
Intern

PURCELL, DENT W., M.D., (Med. Col. of Ga.)
Third Year Resident

SCHNEIDERMAN, M. H., Ph.D., (Colorado State U.)
Postdoctoral Fellow in Radiation Biology

TONKIN, ALLEN K., M.D., (Univ. of Louisville)
First Year Resident

TONKIN, INA L., M.D., (Univ. of Louisville)
First Year Resident

VENTERS, DAVID B., M.D., (Univ. of Alberta)
Third Year Resident

WALBROEL, CHARLES E., M.D., (Univ. of Florida)
Third Year Resident

WEINSHELBAUM, ARLENE M., M.D., (U. of Chicago)
Second Year Resident

WEST, BARBOUR D., M.D., (Univ. of Kentucky)
Second Year Resident

SURGERY

ABNEY, HOWARD T., M.D., (Med. Col. of Ga.)
Third Year Resident in General Surgery

ASHLEY, ROBERT G., M.D., (Univ. of Florida)
Intern in General Surgery

BALISON, JEFFREY R., M.D., (Univ. of Chicago)
Second Year Resident in General Surgery

BAREFOOT, SHERWOOD W., JR., M.D.,
(George Washington University)
First Year Resident in General Surgery

BEGELMAN, KENNETH M., M.D., (Univ. of Chicago)
Intern in General Surgery

BROWN, ROBERT G., M.D., (Duke University)
Third Year Resident in General Surgery

BUSHKIN, FREDERICK L., M.D., (Howard Univ.)
Second Year Resident in General Surgery

CUNNINGHAM, CALHOUN D., M.D.,
(Medical College of South Carolina)
First Year Resident in General Surgery

DEAL, THOMAS E., M.D., (Univ. of Florida)
Second Year Resident in General Surgery

DEARDOURFF, STEPHEN L., M.D., (Ohio State Univ.)
Second Year Resident in Urology

DETURE, FRANCIS A., M.D., (Univ. of Florida)
First Year Resident in General Surgery

DIAZ, CLAUDIO J., M.D., (Univ. of Salamanca)
Second Year Resident in Neurosurgery

DIXON, JIMMY L., M.D., (Med. Col. of Ga.)
Second Year Resident in General Surgery

DOBSON, DEAN M., M.D., (Bowman Gray)
Third Year Resident in Urology

ESCOBAR, NELSON, M.D., (Univ. of Salamanca)
Third Year Resident in Neurosurgery

FAITH, MARK E., M.D., (Univ. of Chicago)
Second Year Resident in General Surgery

FRIST, JOHN C., M.D., (Washington University)
Third Year Resident in General Surgery

FROMANG, DAVID L., M.D., (Univ. of Florida)
Intern in General Surgery

GIRARDET, ROLAND E., M.D., (Univ. of Lausanne)
Clinical Fellow;
Thoracic and Cardiovascular Surgery

GRIGGS, THOMAS M., M.D., (Univ. of Va.)
Third Year Resident in Otolaryngology

GURUCHARRI, VINCENT P., M.D., (Univ. of Chicago)
Intern in General Surgery

GYGI, ANDREW C., JR., M.D., (Univ. of N.C.)
First Year Resident in Orthopaedics

HARMON, CHARLES K., M.D., (Washington Univ.)
Third Year Resident in General Surgery

HESS, PHILIP J., M.D., (Ohio State Univ.)
Chief Resident in General Surgery

HILL, HENRY L., JR., M.D., (Emory University)
Intern in General Surgery

JENKINS, D. ORVIN, M.D., (Univ. of Florida)
Third Year Resident in General Surgery

JONES, DAVID T., M.D., (Ohio State Univ.)
Administrative Chief Resident in General Surgery

JONES, JEFFREY S., M.D., (Univ. of Florida)
First Year Resident in General Surgery

JORDAN, WILLIAM R., M.D., (Univ. of N.C.)
First Year Resident in General Surgery

LACEY, J. ALLEN, M.D., (Univ. of Georgia)
Third Year Resident in Orthopaedics

MacMILLAN, DAVID M., M.D., (Univ. of Florida)
Third Year Resident in Neurosurgery

MacNAUGHTON, ROBERT J., JR., M.D., (Univ. of N.C.)
Second Year Resident in General Surgery

MANDELL, JAMES, M.D., (University of Florida)
First Year Resident in General Surgery

MANISCALCO, JACK E., M.D., (Univ. of Florida)
First Year Resident in Neurosurgery

MANN, CHARLES H., M.D., (West Va. Sch. of Med.)
Second Year Resident in Otolaryngology

MARSH, BURTON W., M.D., (Univ. of Florida)
Chief Resident in Orthopaedics

MAYL, NATHAN, M.D., (Stanford University)
Chief Resident in General Surgery

MERRITT, WYNDELL H., M.D., (Univ. of N.C.)
Third Year Resident in General Surgery

MILIAN, MIGUEL, M.D., (University of Havana)
Clinical Fellow;
Thoracic and Cardiovascular Surgery

MORRIS, JOSEPH L., M.D., (Yale University)
Chief Resident in Orthopaedics

NELSON, ROBERT P., M.D., (Univ. of Florida)
Intern in General Surgery

O'LEARY, JAMES P., M.D., (Univ. of Florida)
Administrative Chief Resident in General Surgery

PICKENS, NORMAN E., M.D., (Univ. of Chicago)
Second Year Resident in General Surgery

POWELL, STEPHEN G., M.D., (Indiana Univ.)
Intern in General Surgery

PRICE, CHARLES T., M.D., (Baylor University)
Intern in General Surgery

PUHL, JAMES J., M.D., (Univ. of Iowa)
Third Year Resident in Orthopaedics

RENN, WADE H., M.D., (Univ. of Florida)
Second Year Resident in Neurosurgery

RIESENBERG, DANIEL M., M.D., (Univ. of Miami)
Intern in General Surgery

ROLLINS, RALEIGH W., M.D., (Med. Col. of Ga.)
Third Year Resident in Urology

ROOKS, JOHN J., M.D., (University of Miami)
First Year Resident in General Surgery

ROTH, ROBERT A., M.D., (Case Western Reserve)
Third Year Resident in Urology

ROWE, CHARLES E., M.D., (Univ. of Virginia)
Chief Resident in Urology

ROY, ROBERT I., M.D., (Yale University)
First Year Resident in Orthopaedics

SCHNEIDER, WILLIAM J., M.D., (Vanderbilt)
First Year Resident in General Surgery

SMITH, CURRAN J., M.D., (Univ. of Missouri)
Third Year Resident in Otolaryngology

STEWART, KEITH C., M.D., (University of Iowa)
Second Year Resident in Otolaryngology

TEACHEY, WILLIAM S., M.D., (Univ. of N.C.)
Third Year Resident in Otolaryngology

TELFORD, GORDON L., M.D., (Univ. of Chicago)
Intern in General Surgery

TEMES, GERALD D., M.D., (SUNY Upstate)
Clinical Fellow;
Thoracic and Cardiovascular Surgery

THOMAS, HENRY F., JR., M.D., (Univ. of N.C.)
Third Year Resident in General Surgery

TOBIAS, JOEL A., M.D., (Univ. of Penn.)
Clinical Fellow;
Thoracic and Cardiovascular Surgery

WEEKS, JAMES B., M.D., (Univ. of Illinois)
Intern in General Surgery

WHANG, CHOONG J., M.D., (Seoul National Univ.)
Third Year Resident in Neurosurgery

YAMOKOSKI, ROBERT P., M.D., (Ohio State Univ.)
First Year Resident in General Surgery

MEDICAL STUDENTS

CLASS OF 1972

Name/Hometown/Internship

ARNOLD, JOHN PAUL/St. Petersburg, Fla.
Baptist Memorial Hospital, Memphis, Tenn.

BAIR, FREDERICK HAIGH, III/Auburndale, Fla.
Baptist Memorial Hospital, Memphis, Tenn.

BLOOMFIELD, STEPHEN HAROLD/St. Pete, Fla.
Medical College of Virginia, Richmond, Va.

BOUCEK, FRANCIS CHARLES/Coral Gables, Fla.
Shands Teaching Hospital, Gainesville, Fla.

BRESTEL, ERIC PAUL/Fort Lauderdale, Fla.
Methodist Hospital, Dallas, Tex.

BRODMAN, RICHARD FERRIS/Scarsdale, N. Y.
Montefiore Hospital, New York, N. Y.

BURDETTE, MARVIN G., JR./Winter Haven, Fla.
Good Samaritan Hospital, Phoenix, Ariz.

CALDWELL, ROY LEE, III/Lake Wales, Fla.
Huntington Memorial Hospital, Pasadena, Calif.

CARR, JOHN PAUL/West Palm Beach, Fla.
Riverside Hospital, Newport News, Va.

CARROLL, ROBERT RUSSELL/Dunedin, Fla.
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COPE, WINSTON THOMAS/St. Petersburg, Fla.
Univ. of Miami Affiliated Hospitals, Miami, Fla.

COURINGTON, CLEO JANE/Cambridge, Mass.
U. of F. Affiliated Hospitals, Gainesville, Fla.

CREBO, ALAN RICHARD/Gainesville, Fla.
Univ. of Ariz. Affiliated Hospitals, Tucson, Ariz.

DINGEMAN, ROBERT DENISON/Alexandria, Va.
Fitzsimmons Army Medical Hospital, Denver, Colo.

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Univ. of Arkansas Hospital, Little Rock, Ark.

ERICKSON, ROBERT ALAN/Arlington, Va.
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FRANZ, KARL SINCLAIR/Chipley, Fla.
Charlotte Memorial Hospital, Charlotte, N. C.

FRIEDEMAN, ELLIOT MICHAEL/Cape Coral, Fla.
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GOERSS, RONALD ARTHUR/Sanford, Fla.
Mary Imogene Bassett Hospital, Cooperstown, N. Y.

HARTLEY, HENRY HIBBARD, JR./Winter Haven, Fla.
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HENDERSON, DONALD RAFAEL/Jacksonville, Fla.
Beth Israel Hospital, Boston, Mass.

HERNDON, WILLIAM ALFRED/USNS Mayport, Fla.
U. S. Navy Hospital, Bethesda, Maryland

JONES, LISTON STEPHEN, JR./Pensacola, Fla.
Mobile General Hospital, Mobile, Ala.

KAGAN, ABBOTT, II/Ft. Myers, Fla.
Shands Teaching Hospital, Gainesville, Fla.

KAPLAN, RAY/Ft. Lauderdale, Fla.
Shands Teaching Hospital, Gainesville, Fla.

LiMARZI, GARY IRVING/Key Biscayne, Fla.
U. S. Navy Hospital, Jacksonville, Fla.

LLOYD, THOMAS MARK/Melbourne, Fla.
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McARTHUR, CLAIRE L., III/Denver, Colo.
L. A. County-U. of So. Cal. Med. Center, L. A., Calif.

McCONE, JONATHAN, JR./Jacksonville, Fla.
Univ. of Penn. Hospital, Philadelphia, Penn.

MANDEL, JEFFREY ARTHUR/Atlanta, Ga.
Highland Hospital of Rochester, Rochester, N. Y.

MAULDIN, JACK LEMUEL/Fountain, Fla.
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MIZRAHI, EDWARD ALAN/Jacksonville, Fla.
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NDIFORCHU, CASSANDRA MAREA/Orlando, Fla.
Shands Teaching Hospital, Gainesville, Fla.

NOLTING, SARA FRANCES/Gainesville, Fla.
Emory University Hospital, Atlanta, Ga.

O'DONNELL, JAMES ALLEN/Daytona Beach, Fla.
Good Samaritan Hospital, Phoenix, Ariz.

PARSONS, JAMES BAKER/Indian Harbour, Fla.
Methodist Hospital, Houston, Tex.

PAYNE, HARLAN ADNER/Plantation, Fla.
Methodist Hospital, Dallas, Tex.

PRESS, JAY/North Miami Beach, Fla.
New England Med. Center Hospitals, Boston, Mass.

RAYBURN, ROBERT LOUIS/Lynn Haven, Fla.
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ROSS, DAVID SCOTT/Orlando, Fla.
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SCALES, JOHN FAIRLEY/Weirsdale, Fla.
Georgia Baptist Hospital, Atlanta, Ga.

SCHWENZFEIER, CARL WILLY/Ft. Lauderdale, Fla.
L. A. County Harbor General Hosp., L. A., Calif.

SHAKULA, JOHN ROBERT/Tampa, Fla.
Univ. of Utah Affiliated Hosps., Salt Lake City, Utah

SHAPIRO, ROBERT PAUL/Brooklyn, New York
Univ. of N. C. School of Med., Chapel Hill, N. C.

SHRADER, DAVID LOWE/Eau Gallie, Fla.
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SONNTAG, ARCH CHRISTIAN/Salt Lake City, Utah
University Hospitals, Madison, Wis.

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SWANSON, GEORGE CHARLES/Gn. Cove Sprs., Fla.
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TALLEY, RICHARD WALTER/Winter Park, Fla.
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THOMAS, FRANK ADKINS/Geneva, Fla.
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Univ. of Calif. Hospitals, Los Angeles, Calif.

WESTFALL, DAVID NOEL/Gainesville, Fla.
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WIGLEY, FREDRICK MARTIN/Largo, Fla.
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WINTERS, PAUL REGAN/Miami, Fla.
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Class of 1973

AUERBACH, DAVID/Largo, Fla.
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BENSON, ANDRE W./St. Petersburg, Fla.
BIANCHI, RAYMOND FRANCIS/Tampa, Fla.
BLUMER, DAVID CHARLES/Lake Worth, Fla.
BOX, PATRICK/Jacksonville, Fla.
CAMPBELL, WAYNE ENZOR/Laurel Hill, Fla.
COPE, LOUISE ANN/Largo, Fla.
EDGERTON, NORMAN BRUCE, JR./Tampa, Fla.
EDWARDS, JAMES RANDALL/Oak Ridge, Tenn.
ELSNER, WILLIAM/Steubenville, Ohio
ENZOR, MARY CHIPLEY/Crestview, Fla.
GLASER, ARTHUR LEWIS/Lake Park, Fla.
GROSS, DAVID A./Jackson Heights, N.Y.
HAAS, GEORGE JAMES/Winter Haven, Fla.
HAUSER, MARK JAY/Miami, Fla.
HOLAHAN, JOSEPH R./Ft. Pierce, Fla.
HOLLAN, CAROL B./St. Petersburg, Fla.
HOLLER, WILLIAM E., III/DeLand, Fla.
JACKSON, THOMAS A./Vero Beach, Fla.
JACOBSEN, DAVID CLARK/Miami, Fla.
KAIDEN, JEFFREY SAMUEL/Miami, Fla.
KANTZLER, GARRICK B./Miami Beach, Fla.
KLAPPER, MITCHELL/Miami, Fla.
KNUDSON, EDWARD CHRISTOPHER/Largo, Fla.
KOVALESKI, CHARLES R./Tallahassee, Fla.
LUTHERER, BERTA DEL CARMEN/Elizabeth, N.J.
McCUNE, BRUCE ROBERT/N. Miami, Fla.
McPHAIL, JOHN F./Niagara Falls, N.Y.
MILLER, BAYARD DODGE/Gainesville, Fla.
NEUSTEIN, CHARLES LEWIS/Miami, Fla.
NORDT, JOHN CHARLES, III/Miami, Fla.
OTT, RICHARD F./Ft. Lauderdale, Fla.
PAULK, HARVEY T., JR./Blountstown, Fla.
PAYNE, JON MICHAEL/Christiansburg, Va.
PERSOFF, NATHAN S./West Palm Beach, Fla.
PETERSON, JOHN CRAIG/Jacksonville, Fla.
PHILLIPS, THOMAS W., IV/Ormond Beach, Fla.
ROCK, JOHN HENRY, JR./Plantation, Fla.
ROSS, WARREN EDWARD/Tampa, Fla.
SCHIEBEL, LEONARD WILLIAM/Lombard, Ill.
SCHWARTZ, HARVEY DAVID/Hollywood, Fla.
SHERRINGTON, BRIAN THOMAS/Cocoa, Fla.
SKLENICKA, RUSSELL CHARLES/Berwyn, Ill.
SMITH, CALDWELL WITHERS/Orlando, Fla.
SOLER-BAILLO, JOSE ANTONIO/Miami, Fla.
STRAIT, WALTER RICHARD/Zephyrhills, Fla.
STRATOS, MILTON S./St. Petersburg, Fla.
SYFERT, DALE FRANK/Blandinsville, Ill.
SZNURKOWSKI, RICHARD-LECH G./Miami, Fla.
TANNER, GUY EDWARD/Tampa, Fla.
THACKER, ROBERT KELLER/Savannah, Ga.
THOMAS, EDGAR LEE/Jacksonville, Fla.
TUTTON, JAMES E., III/Daytona Beach, Fla.
WILLIAMS, GREGORY DAVID/Tampa, Fla.
WILLIS, WAYNE SHELTON/Pensacola, Fla.
WING, MARY BETH/St. Petersburg, Fla.
WOLF, JOHN STUART, JR./Lake City, Fla.
WOOD, JOHN LAWRENCE/Gulfport, Fla.
ZIMMERMAN, DALE F./Andalusia, Penn.

Class of 1974

ALLEN, STEPHEN CLEMENTS/Maitland, Fla.
ANTINORI, JAMES VINCENT/Tampa, Fla.
ARMSTRONG, DONALD/Miami, Fla.
BALLINGER, WILLIAM EDWARD/Melbourne, Fla.
BARWICK, KENNETH WAYNE/Mulberry, Fla.
BAUM, CARL IRA/Gainesville, Fla.
BOTTOMS, SIDNEY FRANKLIN/Pensacola, Fla.
BUCHHOLZ, ROBERT ALAN/Ft. Lauderdale, Fla.
CAIL, WAYNE STEPHEN/Miami Springs, Fla.
CAVENDER, ROBERT COLLINS/Vero Beach, Fla.
CHIN, FRANK TUIN WONG, JR./Miami, Fla.
COLEMAN, JAMES MICHAEL/Maitland, Fla.
CUMMINGS, NANCY PAIGE/Jacksonville, Fla.
CURRY, SUSAN LINDA/Gainesville, Fla.
DAVIS, JOSH DANIEL, JR./Gainesville, Fla.
DeKOSKY, STEVEN TRENT/Gainesville, Fla.
DELANEY, ALLEN G./Gainesville, Fla.
DENNIS, KENNETH MICHAEL/Pensacola, Fla.
EVANS, HARRY LAUNIUS/Mobile, Ala.
FOX, LAWRENCE STEVEN/Sarasota, Fla.
FRANCIS, GARY LEE/Jacksonville, Fla.
GRANADE, MARY ETHEL/Gainesville, Fla.
HADLEY, PHILLIP, SR./Ft. Lauderdale, Fla.
HALL, HAL VAN/Palatka, Fla.
HASLAM, ERNEST GEORGE/N. Hollywood, Fla.
HAWKINS, RONNEE ZOE/St. Petersburg, Fla.
HESTER, ROZALYN LENORA/Atlanta, Georgia
HIGGS, PHILIP EDWARD/Orlando, Fla.
HIMOT, EDWARD DAVID/N. Miami Beach, Fla.
LAUTERIA, SIDNEY FRANK/Orlando, Fla.
LAWVER, ALICE IRENE/West Palm Beach, Fla.
LEAL, JORGE JOSE/Miami, Fla.
LEXOW, STEPHEN STEWART/Sarasota, Fla.
LITHMAN, JERRY RICHARD/N. Miami, Fla.
LUDWIG, MARK EDWARD/Clearwater, Fla.
MAHER, JAMES WILLIAM/Ft. Lauderdale, Fla.
MAHONEY, JOHN PATRICK/Orlando, Fla.
MALMBORG, JOHN CHRISTMAN/Jacksonville, Fla.
McDONALD, ANTHONY P./Walnut Creek, Calif.
MOORE, JOHN CLIFTON, III/Lakeland, Fla.
MOYER, ROBBIE S./McComb, Miss.
NDIFORCHU, ABRAHAM FOMBE/Cameroon, W. Afr.
OBER, KARL PATRICK/Seffner, Fla.
PERAZA, JOEL CARY/Far Rockaway, New York
POWLEDGE, DARRELL FRANKLIN/Marianna, Fla.
ROGERS, CHARLES LAWSON/Lakeland, Fla.
SAPP, LARRY EDWIN/Gainesville, Fla.
SCHWARTZER, JOSEPH SIMON/Miami, Fla.
SIMMONS, CURTIS TIMOTHY/Jacksonville, Fla.
SIMMONS, ETHEL SULTANA/Chesapeake, Va.
SLATKOFF, MARC LESTER/Plantation, Fla.
SMALLY, ALAN JON/Sarasota, Fla.
SMITH, LAMAR HENRY/Tampa, Fla.
SMUCYGZ, DONALD WALKER/Jacksonville, Fla.
SODEN, KEVIN JOSEPH/Richmond, Va.
STENGER, JO ANNE SARAH/Coral Gables, Fla.
SUHRER, JULIAN STEPHEN/Jacksonville, Fla.
TIDWELL, PAT THOMAS/Orlando, Fla.
TUCHMAN, MICHAEL MOISES/Miami Beach, Fla.
WALKER, ROBERT BRUCE/Temple Terrace, Fla.
WASE, RAYMOND EDWARD, JR./Cape Coral, Fla.
WEST, STEPHEN EUGENE/Jacksonville, Fla.
WHIBBS, WILLIAM JOSEPH/Pensacola, Fla.
WILBERS, LAWRENCE LEE/DeLand, Fla.
WILEY, HENRY ERNEST, III/Tampa, Fla.
WILLIAMS, BYRON ROBINSON, JR./Honea Path, S.C.
WILSON, DAVID LEON, III/Jacksonville, Fla.
WRAY, WALTER HARRILL, JR./Tallahassee, Fla.
ZARITZKY, DAVID RON/Hollywood, Fla.

Class of 1975

ANDERSON, FRANCYNE OLIVIA/Petersburg, Va.
BAUSHER, JUDITH ANN/Hamburg, N.Y.
BENEDETTO, DOMINICK ANTHONY/Woodbury, N.J.
BUCKLEY, ROBERT/Gainesville, Fla.
BURDETTE, DAVID CHAMBERS/Winter Haven, Fla.
BYLER, PHILIP RAY/Blountstown, Fla.
CAMPBELL, DAVID MAXWELL/Laurel Hill, Fla.
CARRELL, ROBERT LEE/Ft. Myers, Fla.
COHEN, JOEL/Maitland, Fla.
COLVIN, DONALD BERNARD/Tice, Fla.
CRAWLEY, GARY LEE/Jacksonville, Fla.
CRUMLEY, LEON ALBERT/Savannah, Ga.
DeMARCO, FRANK JOHN, JR./Gainesville, Fla.
DEROVANESIAN, JACK/Opa Locka, Fla.
EADDY, LIVINGSTON LEE, JR./Lake City, Fla.
EBERLY, DONALD ALAN/Sarasota, Fla.
ELLIS, GERRY FRANCIS/Crestview, Fla.
FIDDELKE, LAURA M./E. Palatka, Fla.
FISHER, WILLIAM FREDERICK/Winter Park, Fla.
FITTS, JERE JONATHAN/Vero Beach, Fla.
FRIEDBERG, HOWARD/Ft. Lauderdale, Fla.
GARRETT, LESLIE WAYNE/Palatka, Fla.
GEFTER, JEFFREY WILLIAM/Jacksonville, Fla.
GOLD, MARK STEPHEN/Hollywood, Fla.
GREEN, DAVID JUSTICE/Haines City, Fla.

HALDEMAN, LARRY WILLIAM/Temple Terrace, Fla.
HAMILTON, JACK ELLIS/Tracyton, Wash.
HARRIS, WILLIE GEORGE/Williston, Fla.
HARTWIG, BRUCE ALLAN/St. Petersburg, Fla.
HASEMAN, MICHAEL/Lakeland, Fla.
HENDERSON, ROBERT CONNAR/Tampa, Fla.
HENDRICKSON, JOHN M., JR./Ft. Lauderdale, Fla.
HUDSON, BRUCE WYETH/Fort Myers, Fla.
IACONA, MARIA ANN/Daytona Beach, Fla.
KING, LAWRENCE PAUL/Denver, Colo.
KRAMER, HOWARD LEIGH/Hollywood, Fla.
LASSITER, WILLIAM BUCHANAN/Huntsville, Ala.
LONG, WILLIAM GROVES, JR./Madeira Beach, Fla.
LOTTENBERG, RICHARD/N. Miami Bch., Fla.
LUKAS, GARRON MICHAEL/Merritt Island, Fla.
McCLURE, SAMUEL SIDNEY/Melbourne, Fla.
McDADE, EDWARD DONALD, JR./Orlando, Fla.
MANNIS, MARK JOEL/Jacksonville, Fla.
MARCUS, ROBERT BROWN, JR./Gainesville, Fla.
MASON, WILLIAM GRAY/Clearwater, Fla.
MEYER, ANTHONY SHELLEY/Winter Park, Fla.
MILLER, RICHARD/N. Miami Beach, Fla.
MORRISON, LEON MACMILLAN, SR./Sebring, Fla.
MORSE, KENNETH HAZEN/Baldwin, N. Y.
MOTT, MARY SUSAN/Lake Wales, Fla.
NEWMARK, ZEPHRON GABREIL/Miami, Fla.
PARARO, LUTHER LEONARD, III/Tallahassee, Fla.
PERKINS, ARTHUR FRANK/Pinellas Park, Fla.
PERRY, JAMES McLEOD/Orlando, Fla.
SADLER, RICHARD BONNELL/Jacksonville, Fla.
SAKAS, EDWARD LAWRENCE/Alexandria, Va.
SANCHEZ, ALEXANDER FRANCIS/Plant City, Fla.
SCHIAVONE, DANIEL CHARLES, JR./Orlando, Fla.
SHORT, DOUGLAS JEFFERSON/Wilmington, Del.
SLATTERY, JAMES BRIAN/Pompano Beach, Fla.
SLEVINSKI, RICHARD STEPHEN/Tallahassee, Fla.
SPALDING, DAVID MURL/Winter Park, Fla.
SPENCER, JAMES CRAIG/Ft. Lauderdale, Fla.
STEINBERG, NORMAN IRWIN/Lowell, Mass.
STEPP, JOSEPH THOMAS/Jacksonville, Fla.
SVENSON, ERIC WOLFGANG/Taylor, Mich.
SWARTZENDRUBER, FREDERICK D./Sarasota, Fla.
SWILLEY, SYLVIA SERENA/Marianna, Fla.
TUCKER, DANIEL McKENDREE/Gainesville, Fla.
VARLEY, ARTHUR JOSEPH/San Diego, Calif.
WATERS, JOHN STEPHEN/Jacksonville, Fla.
WEYERS, BARBARA ANN/Maitland, Fla.
WILLIAMS, CHARLES ALFRED/Orlando, Fla.
WILLIAMS, DENNIS EUGENE/Miami, Fla.
ZARZOUR, ROBERT JOSEPH/Miami, Fla.

GRADUATE STUDENTS

Biochemistry

BUNDE, TERRY/Orlando, Fla.
DANOFF, NANCY/Quebec, Canada
DENSLOW, NANCY M./Falls Church, Va.
GREEN, WILLIAM E./New York, N. Y.
HALL, ELIZABETH R./Corpus Christi, Texas
HAMMOND, JOHN/Valparaiso, Fla.
HSIUNG, MON-LI/Taipei, Taiwan
MARTIN, GREG/Wayne, Michigan
MATTERN, MICHAEL/Palmerton, Pa.
MOERCK, HESTER/Hartford, Conn.
RAO, KATIKININI M. K./Durham, N. H.
SHORT, NEAL/Shelby, Iowa
SPRINKLE, TERRY J./Gainesville, Fla.
SWINEHART, JANET/Danville, Pa.
THRALL, CARY/Union City, Indiana
WELCH, DANIEL W./Nova, Ohio

Immunology & Medical Microbiology

BENSON, ROBERT H./Hialeah, Fla.
BLALOCK, JAMES E./Madison, Fla.
*COHEN, MICHAEL A./New York, N. Y.
CROWE, CHRISTINE/Gainesville, Fla.
CUCHENS, MARVIN/Pensacola, Fla.
*DAMATO, JAMES/Gainesville, Fla.
*FRANCO, JORGE A./Gainesville, Fla.
*GADOL, NANCY/Washington, D. C.
*GIORDANO, GERALDINE/Philadelphia, Pa.
HUFF, NORMAN/Spencer Co., Ind.
JIMENEZ, HUMBERTO/Havana, Cuba
JONES, FRANCES F./Rock Hill, S. C.
*KNITTLE, MARY A./Atlanta, Ga.
McCUMBER, LARRY/Mullins, S. C.
*PEARCE, DAVID/Columbus, Ohio
PEAVY, DUANE/Dayton, Ohio
SENTERFITT, VERNON/Pensacola, Fla.
*SHIMP, ROBERT/Jacksonville, Fla.
SILVA, ROBERT/Louisville, Ky.
TULLISH, JOHN/Weymouth, Mass.
WASHINGTON, LOUIS/New Orleans, La.
WOOD, SCOTT H./Chipley, Fla.
YOCUM, DAVID/Rochelle, Ill.

Neuroscience

BAISDEN, RONALD H./Pensacola, Fla.
GELDERD, JOHN B./Clearwater, Fla.
GOULD, WILLIAM/Ft. Pierce, Fla.

Pathology

BURCHARDT, HANS/Igadan, Nigeria
*FISKE, ROBERT (DVM)/Elsinore, Calif.
KILLINGSWORTH, LAWRENCE/Edison, Ga.
*LEITNER, SHARON/Miami, Fla.
McGEE, JAMES H./Gainesville, Fla.
OLIVER, RICHARD/Salt Lake City, Utah
*SHIPE, JAMES/Louisville, Ky.

Pharmacology & Therapeutics

ACKERMAN, DENNIS M./Baltimore, Md.
BOTTOMS, GLENDA/Marianna, Fla.
DUNLAP, CLAUD EVANS, III/Camp Atterbury, Ind.
DVORCHIK, BARRY/Bridgeport, Conn.
LIDDELL, NORMAN/Menlo Park, Calif.
MALAGODI, MARJORIE H./Annandale, Va.
ROWELL, PETER P./St. Petersburg, Fla.
SILVERSTRI, RAUL/Vignola (Modena) Italy
WECKER, LYNN/Oceanside, N. Y.

Physiology

ALLEN, PAUL D./Gainesville, Fla.
BURNS, ALASTAIR/Kalispell, Mont.
*CHIOCCA, MARIE ANNE/ New York, N. Y.
DODDINGTON, HAROLD/Hallendale, Fla.
ELLIS, CLYDE (JIM) A./Live Oak, Fla.
*EVANS, JOHN NEWTON/Worcester, Mass.
*GROSSFELD, SERIL/Carona, N. Y.
*HURD, RUSSELL W./Gainesville, Fla.
HUNT, RAYMOND D. /Melrose Park, Ill.
NELSON, ELDON L./Greenville, N. C.
*NEWSOME, DEBORAH G./Atlanta, Ga.
NOEL, STEPHEN/Pensacola, Fla.
PEREZ, JOSE M./Miami Beach, Fla.
*PUGLIESE, LINDA/New York, N. Y.
SPRAY, DAVID C./Oak Ridge, Tenn.
THRASHER, TERRY N./Leavenworth, Kan.
*TUCEK, PAUL/Berwyn, Ill.
*TUCKER, CHRISTINE/Greensboro, N. C.
TYLER, THOM/Richmond, Va.

Radiation Biophysics

*FISCHLER, LOIS/Quincy, Mass.
*FORSYTHE, RONALD/Denver, Colo.
*IZZO, PAUL G./Newton, Mass.
*McVEY, JAMES T./Gainesville, Fla.
*MORIN, RICHARD/Miami, Fla.
*PARR, LAURENCE/Indiatlantic, Fla.
*SCHULTZ, DAVID/Cleveland, Ohio
*WILSON, JAMES ROLAND/Pensacola, Fla.

*Students pursuing M.S. degrees

1972-73

FLORIDA STATE UNIVERSITY • FLORIDA A&M UNIVERSITY
UNIVERSITY OF FLORIDA COLLEGE OF MEDICINE

PROGRAM IN MEDICAL SCIENCES

A Cooperative Inter-University
Program In Medical Education
For The State of Florida

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GENERAL CONSIDERATIONS

PHILOSOPHY AND PROGRAM DESCRIPTION

The Program in Medical Sciences (PIMS), a new inter-university approach to medical education, began in the fall of 1971 on the Florida State and Florida A & M University campuses in Tallahassee. In this program the two universities in the state capitol have combined efforts to provide instruction in the pre-clinical medical sciences parallel to the first year curriculum of the University of Florida College of Medicine. Those students who obtain *secured status* are assured a position at the University of Florida College of Medicine for completion of their education leading to the M.D. degree.

Since this instruction is integrated with a typical undergraduate degree program in a college such as Arts and Sciences, the time permitted to reach competency in the preclinical science is quite flexible. While it is anticipated that many students will spend five years in reaching this level, a number of accelerated students may do so in four years; other students in six.

The right to enroll in courses of the program is self determined by the student and requires only that he or she be enrolled as a full-time undergraduate student at Florida State University or Florida A & M University. In most cases the student will begin such courses in the sophomore or junior year of college.

From those students enrolled and moving through the program, an evaluation committee determines which students are assured transfer to the Gainesville campus and the appropriate date of transfer. This assurance, called *secured status,* may be achieved by the student as early as the sophomore year of the undergraduate program, and normally will be achieved no later than the end of the student's junior year.

Students with *secured status* have the additional option of applying to any other medical school without loss of such status. Students who do not receive secured status by the beginning of their senior year still have the prerogative of applying to the medical schools of their choice through standard application procedures.

The curriculum is designed about a nucleus of existing courses in the social, biological and physical sciences at Florida State and Florida A & M Universities. The basic core curriculum includes all the traditional basic science disciplines, short of physical diagnosis and systemic pathology. Clinical seminars and varied clinical experiences are furnished by the community of practicing physicians in Tallahassee with the cooperation of Tallahassee Memorial Hospital.

The first secured students will transfer to the medical campus at Gainesville in September, 1972. By 1975 up to fifty students per year will be transferring to Gainesville, having started their medical education in this new program at Tallahassee.

FACILITIES AT FSU AND FAMU

The Tallahassee campuses of the Program in Medical Sciences at Florida State and Florida A & M Universities are modern, pleasant campuses with a wide variety of undergraduate and graduate programs. The two campuses combined have an enrollment of nearly 25,000 students.

On both campuses there are new buildings for the natural sciences, either recently constructed or under construction. Among these are chemistry and biochemistry, molecular biophysics, physics, biology and psychology on the Florida State campus and the College of Pharmacy building on the Florida A & M campus.

The Program in Medical Sciences has its administrative offices in the Student Health Center on the Florida State campus. The program recently has opened a Medical Sciences Learning Center at Florida State. The major portion of the space is developed for self-instructional modules including audiovisual tape-slides, computer assisted and computer managed instruction, video tape, and film. This Center also includes space for laboratory dissection associated with human gross anatomy, faculty offices, and a seminar room for clinical instruction. A learning resources library provides space for reading and informal relaxation. It is planned that the Medical Sciences Learning Center will be the focal point for student and faculty interaction and will be open on a 24 hour basis.

THE COMMUNITY OF TALLAHASSEE

The community of Tallahassee, the state capitol, is in the rolling hills of the Big Bend country of northern Florida where the panhandle joins the peninsula. It is a city of 85,000 population whose major economy is state government and higher education.

As would be expected with two major universities, the cultural events, drama and music, and the athletic events are of a high caliber. Both Florida State and Florida A & M Universities engage in a full slate of intercollegiate athletic competition.

The clinical correlations for the medical sciences courses are taught by the staff of Tallahassee Memorial Hospital, a modern 750 bed hospital with all medical specialities and subspecialities represented on the staff. The hospital is planning an addition for ambulatory services to include the necessary clinical facilities for a developing residency program in family medicine in association with the Department of Community Health and Family Medicine of the University of Florida.

ACADEMIC CONSIDERATIONS

THE LIBERAL ARTS PHILOSOPHY

In the continuum of medical education, the undergraduate college years represent a unique opportunity for the student. The physician's role in the community, as well as the quality of the health care he delivers, in no small way reflects the quality and breadth of his liberal arts education. In our concern for the health of society, the environment, and the community, it is essential that we devise means to join the impressive knowledge of the physical and biological sciences to the critical knowledge of the social and behavioral sciences. Problems of social change, urban planning, welfare and poverty are not isolated from health care, but rather are intimately interrelated.

The Program in Medical Sciences, as an integrated medical science-liberal arts program, is uniquely suited to allow the student a choice of pathways involving both the natural and the socio-behavioral sciences, while simultaneously furnishing a set of experiences in health care planning and health care delivery. Thus, the opportunity exists for the students to recognize the relationship of health care to the social and behavioral sciences prior to receiving the baccalaureate degree, with access to faculty and additional course work in these areas.

THE ROLE OF THE COMMUNITY COLLEGE

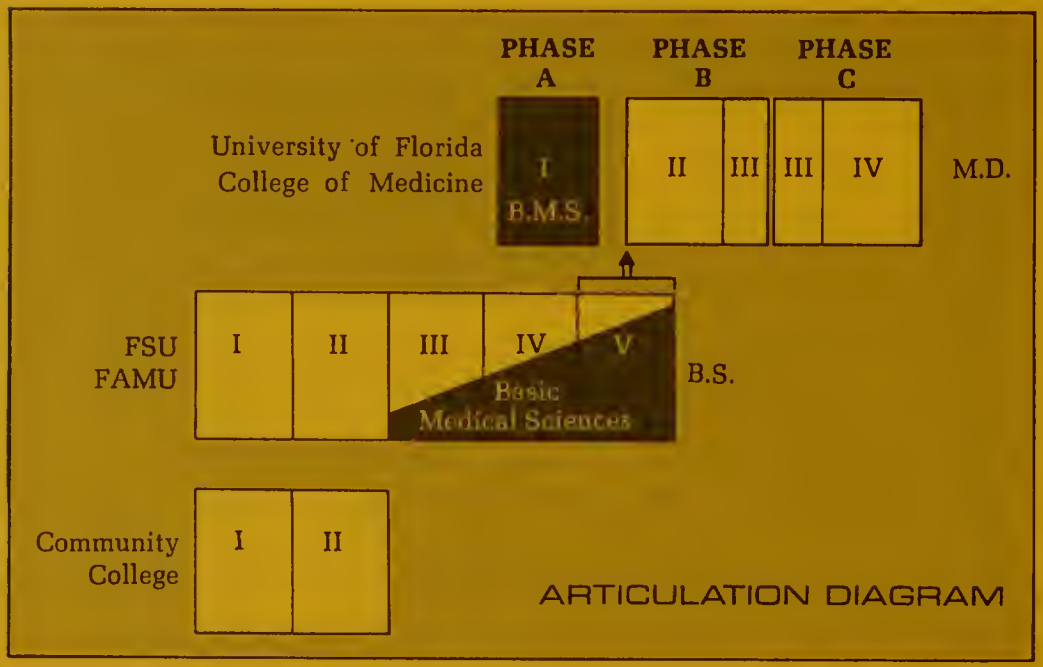
The Florida higher education system encompasses a group of excellent community and junior colleges which articulate with the senior institutions at the Associate of Arts degree level. The curriculum and the student evaluation procedures are designed within this educational framework, so the community college transfer will not be placed at a disadvantage upon entering the Program in Medical Sciences at the junior undergraduate level.

Specific course suggestions for community college students are listed under the section on Curriculum: Years 1 & 2.

TIME FLEXIBILITY OF THE PROGRAM

The diagram on the following page indicates the nature of the interrelationship of the community college, the two senior institutions, Florida State and Florida A & M and the College of Medicine at the University of Florida.

The inherent time flexibility of the program allows a secured student to transfer to the University of Florida after four, five, or six years in Tallahassee. The combined minimum educational path to the M.D. degree is six years from high school; the maximum is nine. Thus the Program in Medical Sciences furnishes an accelerated path for the highly motivated, well prepared student without penalizing the student who comes from a disadvantaged educational background or who decides later in the college program on a career in medicine.



In traditional medical programs, the right to enroll in the medical curriculum is coupled with the admissions procedure. The Program in Medical Sciences furnishes the student an opportunity to enroll in the course work of medical science while he or she is being considered for a *secured* transfer position to the clinical portion of the medical curriculum in Gainesville. Eligibility for participation in the program requires only that the student be enrolled in any college at Florida State or Florida A & M University as a full-time undergraduate with sophomore or junior standing.

Enrollment in PIMS courses depends on fulfillment of the respective prerequisites and normally occurs at the beginning of the junior undergraduate year, although students may elect to begin the program courses slightly earlier or later. In program courses of restricted enrollment number, priority will be given to participants in the program.

The Program in Medical Sciences is an undergraduate program, both functionally and philosophically. Thus, participation in the program and the receipt of secured status is restricted to full-time enrolled undergraduate students at Florida State and Florida A & M Universities.

EVALUATION OF THE STUDENT

PROCEDURE

At the time a student indicates a desire to participate in the program, the Student Evaluation Committee assumes responsibility for evaluating the student's progress toward the point of transfer to the clinical program in Gainesville

Evaluation occurs on a continuing basis with communication of the evaluation to the student. The result is one of four designations for the participants, as follows:

P -- Program Participant — This occurs at the point of self-selection.
S -- Secured — A clinical position is being held for this student, the date of transfer yet to be determined.
SA-Secured -- Phase A — Student will transfer to clinical program following an additional year of academic study in the Medical Sciences Program.
N -- Nonparticipant — The student has been informed by the Evaluation Committee that continued participation in the program will not result in secured transfer to the clinical program.

Secured status may be achieved by a student as early as the end of the sophomore year but normally will be obtained during and not later than the junior year. Secured status does not preclude the right of the student to apply at the beginning of his senior undergraduate year to any medical school.

CRITERIA

The Evaluation Committee will utilize all appropriate information, including academic, personal, experiential and demographic data to help determine the status of a student at any point in the continuous evaluation. Longer association with each student in the program will allow the Evaluation Committee to emphasize personal qualities such as motivation, sensitivity and maturity. This does not indicate a deemphasis on academic preparation, but rather that differences in acceptable academic performance will be of less importance to the committee than those human and personal attributes which are so essential to the art of medical practice.

With the participation of Florida A & M University (a traditionally black university in the state system) as an integral part of this program, the PIMS faculty and

administration is strongly committed to increasing opportunities for minority students to enter into medical education and the practice of medicine.

In like fashion PIMS strongly encourages women students to enter the program. These participants will receive equal attention and be evaluated on an equal basis with male participants in competition for the secured positions.

The Medical College Admissions Test is required of all students transferring to the University of Florida College of Medicine or to any other clinical program with advanced standing. Since secured status may be awarded in the late sophomore or junior undergraduate years, such decisions will often be independent of scores on the MCAT. Students who receive secured status without such test scores will be expected to take the examination for informational purposes only.

OPTIONS — THE SECURED STUDENT

A Program student receiving secured status in his or her junior undergraduate year (or earlier) has the following options: to accept the secured position for the University of Florida College of Medicine, in which case no direct applications to medical school are necessary; to hold the secured position while applying to medical schools other than the University of Florida for entrance as a first year student, and to complete the program and apply for advanced standing at medical schools other than the University of Florida.

OPTIONS — THE NONPARTICIPANT

A Program student receiving the classification of nonparticipant should take the Medical College Admissions Test in the spring of his junior year. The student then should apply for direct admission to any medical school at the beginning of his or her senior year, as would premedical students at any other institution.

CURRICULUM

YEARS 1 & 2

The first two years of undergraduate education may take place at a community college or at Florida A & M or Florida State University. In any case, the student should be completing the liberal studies requirements (see the University catalogs for particular requirements) and beginning the prerequisite courses necessary for the program. These include any or all of the following courses: introductory biology or zoology (course for potential majors); one year of general chemistry; one year of organic chemistry; one year of college level mathematics (up to or including calculus); one year of general physics; one year of behavioral science, and completion of the second year in a foreign language.

At this time the student also should be planning a curriculum for years 3, 4, and 5 in terms of the college and the major to be selected. Most Program students will be

enrolled in the College of Arts and Sciences at FAMU or FSU but this is not a prerequisite for participation in the program.

YEARS 3, 4, [AND 5]

The primary concerns in the last years of the program include the following: to complete all requirements for a baccalaureate degree at Florida A & M or Florida State University; to complete the required Program in Medical Sciences courses in the areas of anatomy, biochemistry, microbiology and immunology, pharmacology, physiology, socio-behavioral sciences, and the introduction to clinical medicine, and to develop some clinical maturity via the clinical seminars, preceptorships with practicing physicians and other directed experiences in health care delivery.

The required medical science course work may be arranged in a pattern to suit the needs of the student. It may be spread over the last three years or concentrated primarily in the last year when the student has received Secured-A status.

TRANSFER TO THE UNIVERSITY OF FLORIDA

The time of transfer generally will occur after five years of undergraduate preparation but a significant number of students should be able to complete the baccalaureate degree and the program requirements in four years of undergraduate preparation. Students with severe educational handicaps at the beginning of their college work or students who determine their interest in medicine at some time later in their undergraduate career may require six years in the program prior to transfer.

The entry point to the University of Florida College of Medicine is at the beginning of Phase B, where the PIMS students will join the Gainesville students in courses of systemic pathology, physical diagnosis and disorders.

SCHEDULE OF TRANSFER CLASSES

Medical Class of	No. of Secured-A Students	Date of Transfer to Gainesville Campus
1975	5	September, 1972
1976	15	September, 1973
1977	30	September, 1974
1978	45	September, 1975
1979	50	September, 1976

STUDENT INFORMATION

FINANCIAL CONSIDERATIONS

TUITION AND FEES

Enrollment in Florida A & M or Florida State Universities carries a registration fee of $190.00 per quarter for Florida residents and $540.00 per quarter for nonresidents engaged in full-time undergraduate study.

The registration fee includes a Student Health fee and a Student Activity fee. Most of the service and facilities of the Student Health Services are available to students without charge. A supplemental insurance program is available on each campus to increase the health coverage. The activity fee covers the student's attendance at a wide variety of social, athletic, and cultural events offered by the two Universities.

SCHOLARSHIPS AND LOAN FUNDS

At Florida State University, a financial assistance program is available to students who, without such assistance, would be unable to attend the University. Financial aid is awarded according to individual need and student costs incident to attending the Florida State University. The Office of Financial Aid administers monies available from federal, state, and University sources in the form of loans, grants, scholarships, and part-time employment. Assistance is normally provided as a package combining a loan, a grant or scholarship (to those who qualify), and a work opportunity.

Florida A & M University maintains a Financial Aid Office to work with needy students. This office seeks through analysis of student environment and family background to give financial assistance to those students who can best benefit from scholarships, loans, and student employment directly administered by the Director of Financial Aid. The Director coordinates grants-in-aid also. This office is located in the Student Union Building, Section A, Room 112. All questionnaires, reports, and requests pertaining to student financial aid should be addressed to the Director of the Office of Financial Aid.

Further information on undergraduate loans and scholarships is available in the General Catalog of each institution.

Secured-A students of the Program in Medical Sciences (students who are in their last year prior to transfer to the campus at Gainesville) are eligible for scholarships and loans related to medical education.

Robert W. Hull Memorial Scholarship Fund: A continuing fund for students enrolled in the Program in Medical Sciences established by friends and colleagues of Dr. Hull, former distinguished Chairman of the Department of Biology at Florida State University. The scholarship-loans are refundable after commencement of professional practice.

Health Professions Scholarship Program: Scholarships to enable talented students from low-income families to undertake the course of study required to become physicians are provided under the Health Professions Educational Amendments of 1965 (Public Law 89-290). These scholarships are available only to such students who without this financial assistance would not be able to pursue the required studies.

National Medical Foundation Scholarships: A financial assistance program supporting part of the costs of medical education for students from minority groups currently underrepresented in the medical profession; specifically, American Blacks, Mexican Americans, Puerto Ricans, and American Indians.

Other Sources: Many students have received financial support from local sources. These may be discovered by inquiries addressed to voluntary health agencies, medical organizations, service clubs, church organizations, or trust departments of banks.

AMA-ERF Medical Education Loan Guarantee Program: The goal of the American Medical Association Education and Research Foundation is to help eliminate the financial barrier to medicine for all who are qualified and accepted by an approved training institution. It is designed to provide a means of financing a substantial portion of the cost of a medical education for students who have performed acceptably in the first year of medical study. The Loan Program for medical students, interns, and residents is the result of a cooperative effort by American medicine and private enterprise. As much as $1,500 may be borrowed annually. These loans are repayable, with interest, after medical training is completed.

Health Professions Educational Assistance Act: The Health Professions Educational Assistance Act of 1963 provides student loans up to a maximum of $2,000 in one academic year. The loans are based on financial need, and are repayable within ten years after graduation. This period begins three years after the student ceases to pursue a full-time course of study at a school of medicine. Interest rates, specified by the Secretary of the Treasury during June of each year, are three per cent per annum, or the designated federal rate at the time the loan is made, whichever rate is the greater.

LIVING ACCOMMODATIONS

FLORIDA STATE UNIVERSITY

Florida State University can accommodate approximately thirty per cent of its students in university housing. Privately operated rooming houses, residence halls, and apartments accommodate the remainder of the students. Since there is a shortage of adequate housing, students are encouraged to make their arrangements as early as possible.

University owned living facilities are equipped with the necessary articles of furniture. Students are expected to furnish blankets or quilts. Other articles of personal furnishings may be supplied by the students according to their individual tastes.

Students are urged to read carefully the information received from either the University Housing Office (on-campus living) or the Off-Campus Housing Office.

FLORIDA A & M UNIVERSITY

Florida A & M University provides eight modern permanent residence halls for undergraduate students, and C. J. A. Paddyfoote Housing Complex. Women students are housed in McGuinn, Diamond, Cropper, Wheatley, Truth Halls and Units C and D of the C. J. A. Paddyfoote Housing Complex. Men students are housed in Young, Sampson, Gibbs Halls and Units A and B of the C. J. A. Paddyfoote Housing Complex.

The residence halls are equipped with reception rooms, recreational and laundry facilities. Bedrooms are equipped with basic items of furniture; however, personal items (such as study lamps, bedding and pillows) are not supplied and are the responsibility of the student. The installations and removal of any and all items of equipment and furnishings must be approved by the Director of Housing.

Information on housing costs and information regarding off-campus married and single housing can be obtained by writing the Director of Housing at the university of your interest.

COURSE DESCRIPTIONS

REQUIRED COURSES FOR PIMS STUDENTS

ANATOMY (FSU)

BIO 339 MICROSCOPIC AND SUBMICROSCOPIC ANATOMY OF VERTEBRATES
4 credits. Prerequisite: BIO 203 (general biology).
PSY 619 SEMINAR IN SENSORY PROCESSES AND NEUROANATOMY
3 credits.
PLE 690 HUMAN ANATOMY
5 credits. Gross and microscopic anatomy of the human cadaver with clinical correlations. The course employs a regional format and extensive use of multi-media, independent study and audiovisual materials.

BIOCHEMISTRY (FSU)

CEM 487 GENERAL BIOCHEMISTRY
4 credits. 4 hours lecture. Prerequisite: CEM 341, 342. Chemistry, metabolism and functions of proteins, carbohydrates, nucleic acids and lipids.
CEM L487 GENERAL BIOCHEMISTRY LABORATORY
2 credits. Recommended 6 hours laboratory. Prerequisite or corequisite; CEM 487 or equivalent. Basic techniques in the study of the chemical constituents of living cells.
***CEM 488 PHYSIOLOGICAL BIOCHEMISTRY**
3 credits. 3 hours lecture. Prerequisite: CEM 487. A course dealing with the biochemistry of the mammalian organism and its tissues. Subjects to be considered include oxygen and carbon dioxide transport control of electrolyte balance, nutrition, chemistry and metabolism of specialized tissues including the endocrine glands.

MICROBIOLOGY (FSU)

BIO 365 MICROBIOLOGY: INTRODUCTORY BACTERIOLOGY
5 credits. Prerequisites: BIO 201, 202; CEM 101, 102; CEM 341, 342 strongly recommended.
BIO 471 IMMUNOLOGY
4 credits. Prerequisite: BIO 365. Theory and application of antigen-antibody formation, structure, and reactivities.

*New course; approval under consideration.

PHARMACOLOGY (FAMU)

PCOL 502-3 GENERAL PHARMACOLOGY
5 credits each. Prerequisites: anatomy, physiology and biochemistry. Study of the effect of drugs on the animal body. The relationship between chemical moiety and biological activity. Study of therapeutic groups and their application to the treatment of disease conditions. 30 hours lecture, 40 hours laboratory per course.

PHYSIOLOGY (FSU)

BIO 401 GENERAL PHYSIOLOGY
5 credits. Prerequisites: BIO 203, organic or physical chemistry. Emphasis on physical and biochemical basis of function in multicellular organisms.
BIO 406 GENERAL NEUROPHYSIOLOGY
5 credits. Prerequisite: BIO 401.
BIO 407 VISCERAL PHYSIOLOGY
5 credits. Prerequisite: BIO 401, CEM 387. Analysis of the homeostasis of organ systems.

SOCIO-BEHAVIORAL (FSU)

Students will elect two of the three courses below. Each of the courses involves field experience of some type.

PSY 513, 513F SOCIO-BEHAVIORAL SCIENCE
2-3 credits. The relationship of health care delivery system to the physical, social and perceived psychological environment of the consumer. Field experience in community health care planning and delivery.
PSY 514, 514F BEHAVIORAL TECHNOLOGY
2-3 credits. The relationship of medical care to other health care professionals and specialists. The impact of technological change on the practice of medicine with emphasis on computer technology. Field experience.
PSY 519, 519L NEUROBEHAVIORAL SCIENCE
2-3 credits. Contributions of behavioral science to the understanding of behavior and the underlying physiological and biochemical mechanisms. Practicum in laboratory research.

CLINICAL SCIENCE (FSU)

BIO 557r SEMINAR IN CLINICAL MEDICINE
2 credits. Prerequisite: consent of instructor. May be repeated for a maximum of 12 quarter hours.

ELECTIVE BASIC SCIENCE COURSES*

BIOLOGICAL SCIENCE (FSU)

BIO 311 GENERAL GENETICS
2 credits. Prerequisites: BIO 201, 202, 203 or equivalent. Must be taken together with one of the following three laboratory courses: 312L, 313L, 314L. Students who have completed BIO 311 and one laboratory course, or who are taking these concurrently, may elect to take one of the other laboratory courses for credit.

BIO 312L LABORATORY IN GENETICS OF HIGHER ORGANISMS
3 credits. Corequisite: BIO 311.
BIO 313L LABORATORY IN BIOCHEMICAL GENETICS
3 credits. Corequisite: BIO 311.
BIO 314L LABORATORY IN MOLECULAR GENETICS
3 credits. Corequisite: BIO 311.
BIO 412 HUMAN GENETICS
3 credits. Prerequisite: one course in genetics or permission of instructor.
BIO 416 RADIATION BIOLOGY
4 credits. Prerequisite: permission of instructor.
BIO 427 ANIMAL BEHAVIOR AND ETHOLOGY
4 credits. Prerequisite: BIO 203.
BIO 444 EXPERIMENTAL EMBRYOLOGY
4 credits. Prerequisite: BIO 337.
BIO 465 MICROBIOLOGY: INTRODUCTION TO BACTERIAL PHYSIOLOGY
5 credits. Prerequisites: BIO 365, organic chemistry. Emphasis on physical and chemical agents affecting bacteria and bacterial metabolism.
BIO 466-67 MICROBIOLOGY: PATHOGENIC BACTERIOLOGY I, II
4 credits each. Prerequisites: BIO 366, 465 or 470; organic chemistry.
BIO 468 MICROBIOLOGY: PATHOGENIC FUNGI
4 credits. Prerequisite: BIO 365.
BIO 469 MICROBIOLOGY: MOLECULAR BIOLOGY OF BACTERIOPHAGES
4 credits. Prerequisites: BIO 201, 202, 203 and 365.
BIO 475 HUMAN PARASITOLOGY
4 credits. Prerequisite: BIO 203.
BIO 510r METHODS OF BIOPHYSICS
4 credits. Prerequisites: BIO 203; organic or physical chemistry. May be repeated to maximum of eight hours credit.
BIO 513 INTERMEDIATE GENETICS
4 credits. Prerequisites: BIO 311, and 312L, 313L, or 314L; or permission of instructor.
BIO 561-2 MICROBIOLOGY: BACTERIAL PHYSIOLOGY
4 credits each. Prerequisites: BIO 465; organic chemistry.
BIO 572-3 MICROBIOLOGY: COMPARATIVE MICROBIOLOGY I, II
4 credits each. Prerequisites: BIO 365; organic chemistry. Emphasis on physiology and biochemistry of microorganisms.
BIO 574 MICROBIOLOGY: MICROBIAL GENETICS
4 credits. Prerequisite: BIO 573.

*Does not take into account the undergraduate major of the student, nor does the list include required premedical courses such as general physics, general chemistry and organic chemistry.

BIO 575 MICROSCOPIC AND SUBMICROSCOPIC TECHNIQUE
2 credits. Prerequisites: BIO 203; permission of instructor.
BIO 575L MICROSCOPIC AND SUBMICROSCOPIC TECHNIQUE LABORATORY
2 credits. Prerequisites: concurrent registration in BIO 575; permission of instructor.
PLE 595 PRIMATE ANATOMY
5 credits. A course designed to examine non-human primates with an emphasis on structure. The Rhesus monkey is the principal laboratory specimen utilized.
FDN 403-4 CLINICAL NUTRITION
4 credits each. Prerequisites: BIO 401 or CEM 487. This course will describe the functional and metabolic role of the nutrients throughout the life span of the normal subject and how these are affected by various disease states. Experience will also be provided in the calculating and eating of several therapeutic diets as well as assessing the nutrition of the nutritional status of subjects in the field.

BIOLOGICAL SCIENCE (FAMU)

BIO 301 PRINCIPLES OF GENETICS
5 credits. Prerequisites: BIO 101, 102, 103. Concerns factors which determine the similarities and differences between generations. Laboratory experiences would be based on a variety of organisms which show similar but not identical patterns of inheritance.
BIO 305 HISTOLOGY
5 credits. Prerequisites: BIO 301, 304. Introduction to the microscopic anatomy of normal tissues and organs.
BIO 306 PHYSIOLOGY, ORGANISMIC
5 credits. Prerequisites: BIO 101, 102, 103, 200, 306 and organic chemistry. Principles of animal physiology including the life processes and quantitative experimentation.
BIO 307 PARASITOLOGY I
4 credits. Prerequisite: BIO 202. Parasitism, habits and environments of parasites; morphology, life cycles, pathology, treatment and prevention of helminth parasites of man and domestic animals. Physiology of helminth parasites.
BIO 308 MICROBIOLOGY
5 credits. Prerequisites: BIO 301; CEM (Biochemistry preferred) 301, 302, 303, and basic immunology. An introduction to the biology of microorganisms; the structure and physiology of bacteria, viruses, rickettsiae and protozoa; laboratory methods in bacteriology.
BIO 401 DIRECTED INDIVIDUAL STUDY
1 to 5 credits. Prerequisites: Advanced juniors and seniors; pre-registration approval of department chairman and participating faculty member. Research or study projects chosen by the student and appropriate faculty member.
BIO 402 CELL BIOLOGY I
4 credits. Prerequisites: BIO 101, 102, 103 and CEM 301 (organic), 302-303 (Biochemistry preferred). An introduction to structural, chemical and physical aspects of cell function including absorption, excretion, growth, division, contraction, conduction and locomotion.
BIO 403 CELL BIOLOGY II
4 credits. Prerequisite: BIO 402. A continuation of studies begun in Cell Biology I.
BIO 404 MOLECULAR BIOLOGY
5 credits. Prerequisites: BIO 301, 308; CEM 301, 302, 303 (Biochemistry). A detailed investigation of subcellular structures and their mode of action; the mechanisms determining cellular differentiation would also be studied. Laboratory studies would be centered primarily but not exclusively on lower organisms.

BIO 405 NATURE AND PROPERTIES OF VIRUSES
3 credits. Prerequisite: BIO 308 (Biochemistry preferred). Classification methods of transmitting assay methods; composition of viruses; multiplication and genetic variability.
BIO 406 RADIATION BIOLOGY
3 credits. Prerequisites: BIO 308, 402. Deals with principles of radiation, chemical effects of radiation, pathological physiology of radiation injury, techniques of handling and using radioactive isotopes.
BIO 409 ENDOCRINOLOGY
3 credits. Prerequisites: BIO 101, 102, 103; biochemistry; general phsyiology; comparative or human anatomy. A study of the endocrine glands and their internal secretions in the body with special emphasis on major cells, structures and functional relationship with other systems in the body.
BIO 518 CELL STRUCTURE AND FUNCTION
5 credits. Prerequisites: BIO 101, 102, 103 (or General Biology); organic and biochemistry preferred. A study of the ultrastructure, physiological, and genetic aspects of plant and animal cells.

CHEMISTRY (FSU)

CEM 367-8 GENERAL PHYSICAL CHEMISTRY I, I I
3 credits each. Lecture, three hours. Prerequisite: CEM 103 and calculus. A quantitative description of macroscopic and molecular properties of matter and chemical reactions.
CEM 399r SPECIAL TOPICS IN CHEMISTRY
1 to 3 credits. Approved for S or U grade only. Departmental approval of an offering of this course must be obtained at least one quarter in advance of the time that it is to be presented. May not be counted as a part of a minor in chemistry.
CEM 407 TECHNIQUES OF RADIOCHEMISTRY
3 credits. Lecture, one hour; laboratory, six hours. Prerequisite: physical chemistry or consent of instructor. Sample preparation and counting techniques; traver methodology and the use of radioisotopes in chemical research.

CHEMISTRY (FAMU)

CEM 401 PHYSICAL CHEMISTRY
4 credits. Prerequisites: Physics 203 and Math 213. A quantitative and mathematical approach to the basic problems of chemistry. Special emphasis is given to thermodynamics and kinetics.
CEM 402 PHYSICAL CHEMISTRY
4 credits. Prerequisite: CEM 401. A continuation of CEM 401.
CEM 403 PHYSICAL CHEMISTRY
4 credits. Prerequisite: CEM 402. A continuation of CEM 402.
CEM 404 BIOCHEMISTRY
5 credits. Prerequisite: CEM 403. A survey of the chemical processes underlying biological transformations.

PHARMACOLOGY (FAMU)

PCOL 501 CLINICAL PATHOLOGY
4 credits. Prerequisites: 1 quarter each of anatomy, physiology and biochemistry. Orientation to disease processes, including pathological changes, infection, degeneration, inflammation,

endocrine and metabolic disturbances, neoplasms. Includes quantitative determinations and diagnostic techniques in hematology, serology, urinalysis, liver functions.

PCOL 504 TOXICOLOGY

3 credits. Prerequisites: PCHM 403 (or Biochemistry) and physiology. Lectures and demonstrations on common household, industrial, agricultural and other economic poisons. Recognition and treatment of poisoning with appropriate antidotes. Modes of action and routes of absorption and excretion of toxicant. Drug potentiation and antagonism, adverse reactions and consideration of individual untoward responses. 30 hours.

PCOL 597 PROBLEMS IN PHARMACOLOGY

2 to 4 credits. Prerequisite: Consent of instructor. Principles of pharmacology research, literature pertinent to a specific problem, designing and conducting experiments for problem-solving, analyzing resultant data, and preparation of a written report.

ELECTIVE SOCIO-BEHAVIORAL COURSES

ANTHROPOLOGY (FSU)

ANY 207 INTRODUCTION TO PHYSICAL ANTHROPOLOGY

3 credits. A study of the biological aspects of man; man in his environment.

ANY 425 HUMAN LOCOMOTOR SYSTEM

3 credits.

ANY 426 ADVANCED PHYSICAL ANTHROPOLOGY

3 credits. Prerequisite: ANY 425

ANY 430 THE EVOLUTION OF MAN

3 credits. Prerequisite: ANY 207

ANY 463 CULTURE AND PERSONALITY

3 credits.

PSYCHOLOGY (FSU)

PSY 306 SENSATION AND PERCEPTION I

3 credits. How man knows and perceives his environment.

PSY 306L SENSATION AND PERCEPTION I LABORATORY

1 credit.

PSY 309 PHYSIOLOGICAL PSYCHOLOGY

3 credits. Prerequisite: six quarter hours of laboratory courses or consent of instructor. Physiological correlates of behavior.

PSY 309L PHYSIOLOGICAL PSYCHOLOGY LABORATORY

1 credit. Prerequisite: six quarter hours of laboratory courses or consent of instructor.

PSY 312 HUMAN LEARNING I

3 credits. Learning which is characteristic of the human organism.

PSY 312L HUMAN LEARNING I LABORATORY

1 credit.

PSY 313 EXPERIMENTAL ANALYSIS OF HUMAN AND ANIMAL BEHAVIOR

3 credits. Prerequisite: PSY 312.

PSY 313L EXPERIMENTAL ANALYSIS OF HUMAN AND ANIMAL BEHAVIOR LABORATORY

1 credit.

PSY 315 CHILD PSYCHOLOGY
3 credits.
PSY 320 PSYCHOLOGY OF ADOLESCENT DEVELOPMENT
3 credits.
PSY 325 INTRODUCTION TO PSYCHOLOGY OF PERSONALITY
3 credits.
PSY 345 SOCIAL PSYCHOLOGY
3 credits.
PSY 350 INTRODUCTION TO PSYCHOLOGY OF ADJUSTMENT
3 credits. Prerequisites: PSY 201 and three quarter hours of psychology.
PSY 380 PSYCHOLOGICAL APPROACHES TO THE NATURE OF MAN
3 credits.
PSY 412 HUMAN LEARNING II
3 credits. Prerequisite: PSY 312 or consent of instructor. Laboratory studies in human learning.
PSY 412L HUMAN LEARNING II LABORATORY
1 credit. Prerequisite: PSY 312.
PSY 425 PSYCHOLOGY OF MENTAL DEFICIENCY
3 credits.
PSY 427 PSYCHOLOGY OF EXCEPTIONAL CHILDREN
3 credits.
PSY 450 ABNORMAL PSYCHOLOGY
3 credits. Prerequisite: PSY 350.
PSY 465 BEHAVIORAL GENETICS
3 credits. Prerequisite: six quarter hours of psychology or biology.

PSYCHOLOGY (FAMU)

PSY 301 HUMAN GROWTH AND DEVELOPMENT
3 credits. An introductory survey of human development from conception through college years. Contributions from biological and social sciences are integrated to give the prospective teacher a view of the learner as a complete entity.
PSY 305 SOCIAL PSYCHOLOGY
3 credits. The behavior of the individual as it relates to the group. The effect of group life and culture in shaping and controlling the individual personality. (Same as SOY 350.)
PSY 314-5 EXPERIMENTAL PSYCHOLOGY
4 credits each. Introduction to the experimental study of behavior including laboratory methods and apparatus design. Primary topics considered are sensation, perception and learning.
PSY 322 PSYCHOLOGY OF LEARNING
3 credits. Basic principles of conditioning and learning, rate of acquisition and degree of retention: transfer effects and related phenomena, and the theories explaining these processes.
PSY 324-5 PHYSIOLOGICAL PSYCHOLOGY
3 credits each. Prerequisites: one year of biological science and one term of statistics. The physiological mechanisms determining reflex action, emotions, locomotion, motor skills, thinking and language. Effects of drugs, internal secretions,and cortical lesions on behavior.
PSY 411-2 ABNORMAL PSYCHOLOGY
3 credits each. Survey of the wide range of ways in which personality may become disordered. Evidence and theories of causation and the problems of treatment are considered with emphasis on prevention.

PSY 420 PSYCHOLOGY OF EXCEPTIONAL CHILDREN
3 credits. Survey course concerning dull and backward children, superior and gifted children, mentally and physically handicapped children, the emotionally handicapped, speech and motor defects, and other topics concerning those who differ so markedly from the generality that special provisions must be made for their education.

SOCIOLOGY (FSU)

SOY 330 HUMAN ECOLOGY
3 credits.
SOY 331 THE URBAN COMMUNITY
3 credits.
SOY 430 POPULATION AND SOCIETY
3 credits.
SOY 570 MEDICAL SOCIOLOGY
3 credits.
SOY 571 SOCIOLOGY OF MENTAL HEALTH, I
3 credits.
SOY 572 SOCIOLOGY OF MENTAL HEALTH, II
3 credits.

SOCIOLOGY (FAMU)

SOY 203 SOCIAL PROBLEMS
3 credits. Theory, an analysis of personal and social disorganization and implications of disorganization for society.
SOY 270 INTRODUCTION TO SOCIAL WELFARE
3 credits. Survey course examining the concepts, attitudes, resources, functions and activities related to the field of social welfare.
SOY 332 RACE AND CULTURE
3 credits. A comparative approach to the study of contact between selected racial and ethnic groups in the modern world.
SOY 334 SOCIAL ADJUSTMENT OF THE AFRO-AMERICAN
3 credits. Critical analysis of events, trends and developments affecting the total social adjustment of the Negro in America.
SOY 335 PROBLEMS IN INTERGROUP RELATIONS
3 credits. Sociological appraisal of problems in intergroup relations in modern America, with special reference to black people.
SOY 342 URBAN SOCIETY
3 credits. Study of the processes and patterns of urban development, the impact of urbanism on social interaction or personal-social adjustment.
SOY 350 SOCIAL PSYCHOLOGY
3 credits. The behavior of the individuals as related to the group. The effect of group life and culture in shaping and controlling the individual personality. The reciprocal relationship between the individual, society and culture.
SOY 372 SOCIAL AND REHABILITATIVE SERVICE
3 credits. A study of agency structure and programs with emphasis on public services in Florida.

SOY 373 SOCIAL WELFARE AS A SOCIAL INSTITUTION
3 credits. Course establishes social welfare as a cognate institution in the American social system.
SOY 375 SOCIAL AND REHABILITATIVE SERVICES
3 credits. A study of agency structure and programs with emphasis on governmental services in social welfare.
SOY 441 POPULATION PROBLEMS
3 credits. Analysis of the growth, composition, distribution, and future trends of population with particular reference to the United States.
SOY 447 THE SOCIOLOGY OF THE METROPOLIS
3 credits. Sociological study of the processes and problems in the large city. Special attention is given to ecology, depersonalization and pathology.
SOY 448 SOCIAL GERONTOLOGY
3 credits. The social implications of an aging population; social adjustments to the aging process; personal adjustments to the roles and statuses of later maturity; a consideration of retirement and public assistance programs for older people.

PROGRAM IN MEDICAL SCIENCES

ACADEMIC PERSONNEL

PAUL R. ELLIOTT, Ph.D.
Director

H. WINTER GRIFFITH, M.D.
Associate Director
for Clinical Affairs

O. M. BERRINGER, Ph.D.
Assistant Director
for Student Affairs

LYNETTE PADMORE, Ph.D.
Assistant Director
for Student Affairs — FAMU

WALLACE A. KENNEDY, Ph.D.
Chairman
Student Evaluation Committee

PIMS ADVISORY COMMITTEE

PAUL R. ELLIOTT, Ph.D.
Professor and Director
Program in Medical Sciences

T. PETER BENNETT, Ph.D.
Professor and Chairman,
Department of Biological Sciences
Florida State University

H. WINTER GRIFFITH, M.D.
Associate Director for Clinical Affairs
Program in Medical Sciences
Director of Medical Education
Tallahassee Memorial Hospital

JOSEPH H. GROSSLIGHT, Ph.D.
Professor and Chairman
Department of Psychology
Florida State University

ROBERT M. JOHNSON, Ph.D.
Graduate Dean and Director of Research
Florida State University

HERBERT E. KAUFMAN, M.D.
Acting Dean
College of Medicine
University of Florida

ROBERT O. LAWTON, Ph.D.
Dean, College of Arts and Sciences
Florida State University

LEEDELL W. NEYLAND, Ph.D.
Dean, College of Arts and Sciences
Florida A & M University

IRA C. ROBINSON, Ph.D.
Dean, College of Pharmacy
Florida A & M University

THEODORE P. WILLIAMS, Ph.D.
Assoc. Professor, Department of Biological Sciences
Florida State University

RICHARD J. WINZLER, Ph.D.
Professor, Department of Chemistry
Florida State University

PIMS FACULTY

BIOLOGICAL SCIENCE

BEIDLER, LLOYD M., Ph.D., LL.D.,
(Johns Hopkins, Muhlenberg)
Professor in Physiology — FSU

BENNETT, T. PETER, Ph.D., (Rockefeller Univ.)
Professor in Molecular Biology — FSU

BERRINGER, O. M., Ph.D., (Univ. of Oregon)
Associate Professor in Anatomy — FSU

BURDICK, M. L., Ph.D., (Johns Hopkins)
Assistant Professor in
Developmental Biology — FSU

BYRAM, J. E., III, Ph.D., (Rice University)
Assistant Professor in Cell Biology — FSU

BROOKS, JUANITA, M.S., (Univ. of Illinois)
Instructor in Physiology — FAMU

DeBUSK, A. GIB, Ph.D., (Univ. of Texas)
Professor in Physiology — FSU

DeKLOET, S. R., Ph.D., (Univ. of Utrecht)
Associate Professor in Molecular Biology — FSU

EASTON, DEXTER M., Ph.D., (Harvard Univ.)
Associate Professor in Physiology — FSU

ELLIAS, LORETTA C., Ph.D., (Univ. of Michigan)
Associate Professor in Microbiology — FSU

ELLIOTT, PAUL R., Ph.D., (Univ. of Michigan)
Professor and Director, Program in Medical Sciences

FOX, L. RAYMOND, Ph.D., (Univ. of Cal., Berkeley)
Assistant Professor in Physiology — FSU

GRAZIADEI, PASQUALE, M.D., (Univ. of Pavia)
Associate Professor in Anatomy — FSU

GREENBERG, MICHAEL J., Ph.D., (Harvard Univ.)
Associate Professor in Physiology — FSU

HOFER, KURT G., Ph.D., (University of Vienna)
Assistant Professor in
Radiation and Cancer Biology — FSU

HOMANN, PETER H., Ph.D., (Inst. of Tech., Karlsruhe)
Associate Professor in Physiology — FSU

HOOD, MARY N., Ph.D., (University of Michigan)
Professor in Microbiology — FSU

LIPNER, HARRY J., Ph.D., (State Univ. of Iowa)
Professor in Physiology — FSU

MENZEL, MARGARET Y., Ph.D., (Univ. of Va.)
Professor in Human Genetics — FSU

PADMORE, LYNETTE P., Ph.D., (Howard Univ.)
Assistant Professor in Genetics — FAMU

PATES, ANNE L., Ph.D., (Univ. of Michigan)
Associate Professor in Microbiology — FSU

ROEDER, MARTIN, Ph.D., (Univ. of N. C.)
Professor of Biology — FSU

SCHENDEL, HAROLD E., Ph.D., (Univ. of Ill.)
Professor of Nutrition — FSU

SHETTY, A. S., Ph.D., (Utah State Univ.)
Assistant Professor in Biochemistry — FAMU

SHORT, ROBERT B., Ph.D., (Univ. of Michigan)
Professor in Human Parasitology — FSU

STRICKLAND, JAMES H., Ph.D., (Purdue Univ.)
Professor in Developmental Biology
and Anatomy — FAMU

STUY, JOHAN H., Ph.D., (Univ. of Virginia)
Associate Professor in Genetics — FSU

SUBRAMANYAM, C. B., Ph.D., (Miss St. Univ.)
Assistant Professor in Vertebrate Biology — FAMU

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1972-1973

A DIVISION OF J. HILLIS MILLER HEALTH CENTER

UNIVERSITY OF FLORIDA, GAINESVILLE

JACKSONVILLE HOSPITALS EDUCATIONAL PROGRAM

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GENERAL CONSIDERATIONS

Jacksonville Hospitals Educational Program (JHEP), a division of the J. Hillis Miller Health Center, was established in 1958 as a cooperative venture among the hospitals of Jacksonville to strengthen graduate medical education programs and provide continuing education for practicing physicians. Over the years a close working relationship developed with the College of Medicine for educational programs. In 1967 JHEP became a division of the Health Center and a formal affiliation between JHEP and the University of Florida received approval from the Board of Regents in 1969.

Since its founding JHEP has developed a pattern of coordination among its member institutions for the improvement of education for interns and residents. Today the graduate educational efforts are perhaps the most extensive aspects of JHEP, with approved internships and residencies in 12 specialty areas.

FACILITIES

There are eight participating JHEP hospitals including Baptist Memorial Hospital, Hope Haven Children's Hospital, Memorial Hospital, Methodist Hospital, Riverside Hospital, St. Luke's Hospital, St. Vincent's Hospital, and University Hospital of Jacksonville which provide a combined total of 2,336 beds, active emergency rooms and extensive ambulatory facilities for the educational programs. The newly opened 500 bed University Hospital is the focal point for most graduate and undergraduate education, and St. Vincent's Hospital is actively developing its offerings in community medicine and family practice for students and house officers. The other member hospitals participate in graduate and continuing education programs. Other facilities such as neighborhood health centers, the State Division of Health, and family planning programs also provide valuable contributions for medical education in an urban setting. Sophisticated diagnostic and therapeutic facilities, an audiovisual center, and a unique library system which utilizes TWX teletype facilities for immediate access to a shared pool of resource materials are all essential components of JHEP.

FACULTY

A cadre of full time teachers constitutes the core of the departmental faculties in JHEP of the University of Florida. The efforts of this group are enriched by the contributions of a clinical faculty of practicing physicians, thus producing a composite faculty experience and background of both private practice and academic

medicine. From the JHEP faculty, the student receives an experience in applying basic principles to the art and science of medicine.

ACADEMIC CONSIDERATIONS

Within the continuum of medical education, JHEP assumes a responsibility for the clinical phases spanning from undergraduate to graduate and continuing medical education. Through the Departments of Family Medicine, Medicine, Obstetrics and Gynecology, Ophthalmology, Pediatrics, and Surgery, JHEP provides advanced undergraduate clinical training to students in the College of Medicine. The curricular offerings on pages 136-137 are available during Phase C, the final year and one-half of elective experiences in the M.D. program. Plans are underway to develop Phase B offerings in the mid-clinical portion of the undergraduate degree program. A medical student at the University of Florida can arrange for the clinical experience in Jacksonville merely by denoting JHEP offerings upon consultation with his advisor.

Although undergraduate educational efforts principally are concerned with the University of Florida College of Medicine, the opportunity also is available to medical students from other institutions to incorporate into their total medical education program a clinical experience at JHEP. JHEP affords an opportunity for students to be exposed to the nuances of medical practice as they occur in a typical practicing community.

STUDENT CONSIDERATIONS

Rooms are provided with some of the curricular offerings. Where there is no such designation, however, it is the student's responsibility to arrange for housing while in Jacksonville. A few rooms are available in the University Hospital for single students and house officers, while a limited number of apartments are available just ten minutes from the University Hospital. Rent starts at $95 a month, and unfortunately requests for these apartments usually exceed their availability. Many apartment complexes are available throughout the city, nevertheless, and a modern expressway system makes the JHEP hospitals accessible with ease from any area of town.

Additional information may be obtained from Dr. Max Michael, Jr., Assistant Dean for JHEP, 655 West Eighth Street, Jacksonville, Florida 32209.

COURSE DESCRIPTIONS

Within the general framework of Phase C in the undergraduate medical curriculum of the University of Florida College of Medicine, a student may select from the following JHEP departmental offerings to meet the requirements of MED 588, MED 589, MED 596, MED 597, MED 598, or MED 599 (Phase C Elected Topics I, II, III, IV, V, and VI.).

Med C-37 EXTERNSHIP IN NEUROLOGY
Consultation service experience on wards and clinics. Rounding at Jacksonville hospitals on private neurology service (Limit: 1 student).

Med C-44 INPATIENT MEDICAL CLERKSHIP
Student involvement in inpatient care on the medical wards and the Coronary Care Unit. Research projects which emanate from patient evaluations are encouraged (housing provided; limit: 4 students).

Med C-45 CLINICAL PROBLEMS IN CARDIOLOGY
Student role of consultant in cardiology for the clinical problems encountered in a large urban community. Diagnostic evaluation of and therapy for these problems including the necessary procedures will be the student's responsibilities. Research projects encouraged (housing provided; limit: 1 student).

Med C-46 CLINICAL PROBLEMS IN GASTROENTEROLOGY
Student role of consultant in gastroenterology for the clinical problems encountered in a large urban community. Diagnostic evaluation and therapy. Research encouraged (housing provided; limit: 1 student).

Med C-47 CLINICAL PROBLEMS IN ENDOCRINOLOGY
Student role of consultant in endocrinology for clinical problems encountered in a large urban community. Diagnostic evaluation and therapy. Research encouraged (housing provided; limit: 1 student).

Med C-48 CLINICAL PROBLEMS IN INFECTIOUS DISEASES
Student role of consultant in infectious diseases for clinical problems in a large urban community. Diagnostic evaluation and therapy. Research encouraged (housing provided; limit: 2 students).

Med C-49 CLINICAL PROBLEMS IN HEMATOLOGY AND IMMUNOLOGY
Student role of consultant in hematology and immunology for clinical problems in a large urban community. Diagnostic evaluation and therapy. Research encouraged (housing provided; limit: 2 students).

Med C-50 CLINICAL PROBLEMS IN EMERGENCY ROOM MEDICINE
Student role of primary physician in emergency room for clinical problems in a large urban community. Diagnostic evaluation and therapy. Research encouraged (housing provided; limit: 4 students).

Obg C-8 CLINICAL OBSTETRICS AND GYNECOLOGY
Clinical responsibilities as a pre-intern in the obstetrical and gynecological programs at the Shands Teaching Hospital or University Hospital of Jacksonville.

Oph C-3 CLINICAL OPHTHALMOLOGY ELECTIVE
Basic techniques and information regarding the practice of ophthalmology and the ocular manifestations of acute or emergency ocular conditions. Proficiency in ocular history and physical examination as well as glaucoma testing, visual field interpretation and the use of specialized instruments such as the slit lamp and direct ophthalmoscope. All categories of

patients including emergencies, out-patients, and inpatients in addition to diagnostic problems referred for consultation from other services (Limit: 1 student).

Oph C-4 OPHTHALMOLOGY — MEDICAL CLINICAL ELECTIVE
A combined effort by the Departments of Ophthalmology/JHEP and Medicine/JHEP to develop in the student an understanding of the general applications of ophthalmology to other areas of medicine through an experience in the Ophthalmology Clinic and the medicine wards (Limit: 2 students).

Oph C-5 OPHTHALMOLOGY — PEDIATRIC CLINICAL ELECTIVE
A combined effort by the Departments of Ophthalmology/JHEP and Pediatrics/JHEP to develop in the student an understanding of the general applications of ophthalmology to pediatric practice through an experience in the Ophthalmology Clinic and the Pediatric Clinic (Limit: 1 student).

Ped C-19 CLINICAL NEPHROLOGY AND FLUID ELECTROLYTE PROBLEMS
Bedside experience in diagnosis and management of children and adults with renal and fluid electrolyte problems. Didactic lectures on kidney disease and fluid electrolyte management (Limit: 2 students).

Ped C-20 CLINICAL PEDIATRICS — NEONATOLOGY
Clinical experience in delivery, well-baby care, newborn follow-up, and fetal monitoring with didactic lectures on infant resuscitation, feeding, prematurity, common newborn problems and well-baby care (Limit: 2 students).

Ped C-21 CLINICAL PEDIATRICS — AMBULATORY MEDICINE
Clinical experience in direct patient care including emergency care, well-child care, specialty clinics, and community prospects. Development of clinical skills followed by supervised clinical work in the outpatient setting. Participation in conferences and seminars (Limit: 3 students).

Ped C-22 GENERAL CLINICAL PEDIATRICS — ROTATING
Experience in diagnosis and management of a wide spectrum of common pediatrics problems largely affecting the urban indigent population (Limit: 6 students).

Ped C-23 PEDIATRIC CARDIOLOGY
Diagnosis and management of children with congenital and acquired heart disease. Fundaments of ECT and VCG interpretation as well as catheterization laboratory experience (Limit: 2 students).

Surg C-3 GENERAL SURGICAL CLERKSHIP
In-house treatment and management of a large number of elective, acutely ill and traumatic surgical patients. Urban medicine including operating room experience and post-operating room care (Limit: 4 students).

Surg C-27 CLINICAL CLERKSHIP IN THORACIC AND CARDIOVASCULAR SURGERY
Thoracic, pulmonary, esophageal, peripheral vascular and open heart problems involving both adult and pediatric surgical cases. The student will be involved with preoperative diagnostic studies working in conjunction with both the adult and pediatric cardiology divisions. Preoperative preparation of the patient, operative management and postop care with subsequent follow-up (Limit: 2 students).

Surg C-28 EMERGENCY ROOM SURGERY
A clinical experience in a large busy urban emergency room with exposures to varieties of acute surgical conditions and acute trauma including repair of lacerations, simple fractures, and major diagnosis (Limit: 4 students).

A.

B.

E.

F.

C.

D.

H.

A. University Hospital of Jacksonville
B. Baptist Memorial Hospital
C. Hope Haven Children's Hospital
D. Methodist Hospital
E. Memorial Hospital
F. St. Vincent's Hospital
G. Riverside Hospital
H. St. Luke's Hospital

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Assistant Dean
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Family Practice

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University Hospital, Jacksonville

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DeMIRANDA, EDWARD, M.D., (Univ. of Havana)
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KRUSE, JOHN C., M.D., (Geo. Washington Univ.)
Clinical Instructor/JHEP

PHILLIPS, DARWIN D., M.D., (Univ. of Tenn.)
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SANCHEZ-SALAZAR, ANIBAL, M.D., (San Marcos U.)
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Clinical Assistant Professor/JHEP

BOOTHBY, RICHARD J., M.D., (State Univ. of N.Y.)
Clinical Assistant Professor/JHEP

BOWERS, JOHN A., M.D., (Med. School of Ga.)
Clinical Assistant Professor/JHEP

CARITHERS, CORNELIA, M.D., (Cornell Univ.)
Clinical Assistant Professor/JHEP

CARITHERS, HUGH A., M.D., (Emory Univ.)
Clinical Associate Professor/JHEP

CRANE, JAMES, M.D., (Duke University)
Clinical Assistant Professor/JHEP

DAVID, J. K., M.D., (Duke University)
Clinical Associate Professor/JHEP

EISEN, SAUL, M.D., (Emory University)
Clinical Assistant Professor/JHEP

FLEET, JOEL, M.D., (Tulane University)
Clinical Assistant Professor/JHEP

FRAME, EUGENE, M.D., (Temple University)
Clinical Assistant Professor

GINTER, MYRNA B., M.D., (Havana Univ.)
Clinical Assistant Professor/JHEP

GYLAND, STEPHEN P., M.D., (Vanderbilt Univ.)
Clinical Assistant Professor/JHEP

HANSBERRY, WILLIAM E., M.D., (Univ. of Miami)
Clinical Assistant Professor/JHEP

IVEY, J. F., M.D., (Baylor University)
Clinical Assistant Professor/JHEP

KELLY, WALTER C., M.D., (Temple Univ.)
Clinical Assistant Professor/JHEP

LANE, JOHN, M.D., (George Washington Univ.)
Clinical Assistant Professor/JHEP

LANIER, JAMES C., M.D., (Vanderbilt Univ.)
Clinical Assistant Professor/JHEP

LaSPADA, ANTHONY, M.D., (University of Bologna)
Clinical Assistant Professor/JHEP

McCAIN, JAMES R., M.D., (Univ. of Tenn.)
Clinical Assistant Professor/JHEP

McINTOSH, CHARLES B., M.D., (Meharry Med. Col.)
Clinical Assistant Professor/JHEP

MOSS, JAMES K., M.D., (Med. Col. of Georgia)
Clinical Associate Professor/JHEP

PERLMAN, M. ALLAN, M.D., (Univ. of Miami)
Clinical Assistant Professor/JHEP

PRICE, MORRIS, M.D., (Emory Univ.)
Clinical Assistant Professor/JHEP

SHASHY, ROBERT A., M.D., (Med. Col. of S.C.)
Clinical Assistant Professor/JHEP

SKINNER, RICHARD G., JR., M.D., (Emory Univ.)
Clinical Professor/JHEP and Assoc. Chmn.

THRELKEL, ROBERT, M.D., (Duke Univ.)
Clinical Instructor/JHEP

TOWNSEND, JAMES W., M.D., (Duke Univ.)
Clinical Assistant Professor/JHEP

WALKER, JAMES W., M.D., (Univ. of Tenn.)
Clinical Assistant Professor/JHEP

WEIL, NATHAN, JR., M.D., (Tulane University)
Clinical Assistant Professor/JHEP

WUBBENA, PAUL, M.D., (Emory University)
Clinical Assistant Professor/JHEP

DEPARTMENT OF RADIOLOGY

Volunteer Faculty

WALKLETT, WILLIAM D., M.D., (Emory University)
Clinical Assistant Professor/JHEP

DEPARTMENT OF SURGERY

General Surgery

STEPHENSON, SAM E., JR., M.D., (Vanderbilt Univ.)
Prof. and JHEP Chairman/JHEP — Univ. Hospital

Volunteer Faculty

ATKINSON, SAMUEL C., M.D., (Tulane Univ.)
Clinical Instructor/JHEP

BENSON, J. ROBERT, M.D., (Washington Univ.)
Clinical Instructor/JHEP

BLACK, BRUCE A., M.D., (Univ. of Florida)
Clinical Instructor/JHEP

BOND, JAMES W., M.D., (Indiana Univ.)
Clinical Assistant Professor/JHEP

COLLINS, CLYDE M., M.D., (Med. Col. of Ga.)
Clinical Assistant Professor/JHEP

DAY, SAMUEL M., M.D., (Washington Univ.)
Clinical Assistant Professor/JHEP

FECHTEL, ALBERT T., M.D., (Tulane Univ.)
Clinical Instructor/JHEP

FERGUSON, EMMET F., JR., M.D., (Med. Col. of Ga.)
Clinical Assistant Professor/JHEP

HURLBUT, H. JOSEPH, M.D., (Emory Univ.)
Clinical Assistant Professor/JHEP

MOSELEY, THAD M., M.D., (Vanderbilt Univ.)
Clinical Professor/JHEP

PHILLIPS, CURTIS M., M.D., (Med. Col. of Ga.)
Clinical Associate Professor/JHEP

REINSTINE, HARRY W., JR., M.D., (Univ. of Va.)
Clinical Assoc. Professor/JHEP and Assoc. Chmn.

ROESCH, C. BURLING, M.D., (Cornell Univ.)
Clinical Associate Professor/JHEP

STILL, ROBERT H., M.D., (Med. Col. of Ga.)
Clinical Instructor/JHEP

STUBBS, GEORGE M., M.D., (Emory University)
Clinical Assistant Professor/JHEP

SUMNER, WILBUR C., M.D., (Med. Col. of Ga.)
Clinical Associate Professor/JHEP

Neurological Surgery

Volunteer Faculty

HUDSON, CALVIN H., M.D., (Univ. of Tenn.)
Clinical Assistant Professor/JHEP

Orthopedic Surgery

DEDO, RICHARD G., M.D., (Northwestern Univ.)
Assistant Prof. and JHEP Chmn./JHEP — Univ. Hosp.

Volunteer Faculty

HOCKER, JOHN T., M.D., (Univ. of Kansas)
Clinical Assistant Professor/JHEP

MEAD, CHARLES A., JR., M.D., (Geo. Wash. Univ.)
Clinical Assistant Professor/JHEP

Otolaryngology

Volunteer Faculty

TAYLOR, G. DEKLE, M.D., (Univ. of Michigan)
Clinical Professor/JHEP

Pediatric Surgery

Volunteer Faculty

SACHS, BARRY F., M.D., (N.Y. School of Med.)
Clinical Assistant Professor/JHEP

WEBB, H. WARNER, M.D., (Emory University)
Clinical Assistant Professor/JHEP

WILKINSON, ALBERT H., JR., M.D., (Jefferson U.)
Clinical Associate Professor/JHEP

Plastic and Reconstructive Surgery

Volunteer Faculty

MORGAN, BERNARD L., M.D., (London Univ.)
Clinical Assistant Professor and JHEP Chairman/JHEP

DUSHOFF, IRA M., M.D., (Univ. of Penn.)
Clinical Assistant Professor/JHEP

Thoracic and Cardiovascular Surgery

GOFF, DALEY, M.D., (Univ. of N.C.)
Assistant Professor/JHEP — University Hospital

Volunteer Faculty

COUSAR, JAMES, M.D., (Johns Hopkins Univ.)
Clinical Assistant Professor/JHEP

DAVIS, JAMES, M.D., (Harvard Medical School)
Clinical Assistant Professor/JHEP

SNYDER, HAROLD E., M.D., (Vanderbilt Univ.)
Clinical Instructor/JHEP

VONTZ, FREDERICK, K., M.D.,
(Medical Academy of Dusseldorf)
Clinical Assistant Professor/JHEP

Urology

Volunteer Faculty

VAN NORTWICK, WILLIAM A., M.D., (Vanderbilt)
Clinical Professor and JHEP Chairman/JHEP

POSTDOCTORAL FELLOWS, RESIDENTS, AND HOUSESTAFF

MEDICINE

ALEMAN, JUAN F., M.D., (Univ. of Salamanca, Spain)
Clinical Fellow

BASS, ANDREW C., M.D., (University of Florida)
Second Year Resident

BIALOW, MARTIN R., M.D., (University of Florida)
Fourth Year Resident

BIANCHI, EDGARDO H., M.D., (U. of Rosario, Argen.)
Third Year Resident

CINTADO, LUIS J., M.D., (U. of Seville, Spain)
Clinical Fellow

DOPSON, GARY, M.D., (University of Florida)
Second Year Resident

EAKINS, JOEY W., M.D., (Bowman Gray Med. Sch.)
Second Year Resident

EYE, EARL H., M.D., (Univ. of W. Va.)
Second Year Resident

FIALA, JOSEF J., M.D., (U. of Brmo, Czech.)
Second Year Resident

LEE, DAVID P., M.D., (University of W. Va.)
Second Year Resident

LIM, GREGORIO T., M.D., (Univ. of Philippines)
Clinical Fellow

RAULERSON, J. DANIEL, M.D., (Univ. of Florida)
Second Year Resident

THOMASON, HENRY C., JR., M.D., (Univ. of N.C.)
Third Year Resident

TSAI, ENOCH N., M.D., (University of Miami)
Second Year Resident

OBSTETRICS AND GYNECOLOGY

BEBERMAN, STANLEY A., M.D., (Univ. of Louvain)
Fourth Year Resident

BRANDON, RICHARD L., M.D., (Univ. of Georgia)
First Year Resident

BRIGETY, REUBEN E., M.D., (Univ. of Florida)
Second Year Resident

CORNEJO, JUAN A., M.D., (U. of Tucuman, Argen.)
Third Year Resident

DRAZINIC, STJEPAN, M.D., (U. of Zagreb, Yugoslav.)
Third Year Resident

FRAZER, J. DECKER, M.D.,
(College of Osteopathy and Surgery)
Second Year Resident

GAMIG, PAUL, M.D., (Heidelberg University)
Third Year Resident

KELLY, ANN JEANNETTE, M.D., (Tulane Univ.)
Second Year Resident

LUTHIN, RICHARD B., M.D., (Univ. of Florida)
Fourth Year Resident

MOHAMMAD, MAHMOOD, M.D., (U. of Tehran, Iran)
Third Year Resident

OLIVER, GEORGE M., JR., M.D., (Univ. of N.C.)
Second Year Resident

SCHIWIETZ, DIETER P., M.D., (U. of Marburg, Ger.)
Fourth Year Resident

VILARDO, ROSS U., M.D., (U. of Palermo, Italy)
Second Year Resident

WEISSBERG, STEPHEN M., M.D., (New York Univ.)
Fourth Year Resident

WOLFENDEN, JOHN W., M.D., (Tulane Univ.)
Third Year Resident

PEDIATRICS

AMORADHAT, VARUNI, M.D., (U. of Siriraj, Thailnd.)
Third Year Resident

ESPINO, HORTENCIA, M.D., (U. of St. Thomas, Phil.)
Second Year Resident

FAJARDO, JESUS, M.D., (U. of San Marcos, Peru)
Third Year Resident

FALL, MYRIAM M., M.D., (U. of LaPlata, Argentina)
Second Year Resident

GUERRERO, LOURDES M., M.D., (U. of Philippines)
Fourth Year Resident

LU, WEN-HSIUNG, M.D., (National Univ., Taiwan)
Clinical Fellow

SUCIU, MARIA N., M.D., (U. of Bucharest, Romania)
Second Year Resident

UNZUETA, CARLOS A., M.D., (U. of San Marcos)
Third Year Resident

SURGERY

ANTAR, MOHAMED, M.D., (U. of Damascus, Syria)
First Year Resident (Urology)

BALLENGER, JAMES F., M.D., (Univ. of S.C.)
Second Year Resident

BAYLES, DONALD E., M.D., (Univ. of Alabama)
Second Year Resident (Plastic Surgery)

BERRIEN, STEPHEN B., M.D., (Univ. of St. Louis)
Second Year Resident

BOLT, DONALD, M.D., (Univ. of Minnesota)
First Year Resident (Plastic Surgery)

BONE, ROBERT C., M.D., (Vanderbilt)
Second Year Resident

BRYANT, DAVID L., M.D., (Univ. of Florida)
Fourth Year Resident

CUTTS, WILLIAM G., JR., M.D., (Univ. of Georgia)
Fifth Year Resident

ELLO, FLORENCIO F., JR., M.D., (U. of St. Tomas)
Fourth Year Resident

ESPINO, GONZALO A. C., M.D., (U. of East, Philip.)
Second Year Resident

FINK, GEORGE, M.D., (Univ. of Michigan)
Second Year Resident (Plastic Surgery)

FLESHMAN, E. KEITH, M.D., (Univ. of Oregon)
Third Year Resident (Orthopedics)

FONSECA, OSCAR D., M.D., (U. of Leon, Nicaragua)
Third Year Resident

FULMER, JACK T., M.D., (Western Reserve Univ.)
Third Year Resident

GERAMI, SIROOS, M.D., (Univ. of Pahlavi, Iran)
Pediatric Surgery

HARB, SHIHADEH K., M.D., (U. of Heidelberg, Ger.)
Fifth Year Resident

HOROWITZ, MARSHALL, M.D., (U. of Basal, Switz.)
Third Year Resident

HURD, RICHARD A., JR., M.D., (Columbia Univ.)
Third Year Resident (Orthopedics)

JILEK, J. JOSEF, M.D., (Charles Univ., Czech.)
Second Year Resident

KAMAL, MUHAMMED A., M.D., (U. of East Pakistan)
Fifth Year Resident

LITTLE, JOHN Z., M.D., (University of N.C.)
Second Year Resident

MALOFF, STEPHEN, M.D., (Univ. of Tenn.)
Third Year Resident

MASSAM, ALFRED R., M.D., (Univ. of Miami)
Third Year Resident

McEWAN, ROBERT, M.D., (Univ. of Tennessee)
Fourth Year Resident (Orthopedics)

MEYER, ROGER, M.D., (Univ. of Cincinnatl)
Second Year Resident

MORALES, LUIS F., M.D., (U. of Geneva, Switzerland)
Fifth Year Resident

PAGE, GEORGE E., M.D., (Univ. of Wisconsin)
Third Year Resident

PRACHAK, SUVARNAPRADIO, M.D.,
(University of Chiengmai, Thailand)
Second Year Resident

RAHIM, FAROUK, H.A., M.D., (U. of Damascus, Syria)
Third Year Resident

RAO, NARASHIMA, M.D., (U. of Gandhi, India)
Third Year Resident

RAPIER, JOSEPH, M.D., (Univ. of Kentucky)
Second Year Resident

RENARD, ANDRE, M.D., (Univ. Libre de Bruxelles)
Second Year Resident

SAHA, SIBU PADA, M.D., (U. of Rajshahi, E. Pakis.)
Fourth Year Resident

SAMIIAN, M. REZA, M.D., (Univ. of Tehran, Iran)
First Year Resident (Plastic Surgery)

SHAW, RUSSELL K., M.D., (University of S.C.)
Fifth Year Resident

SIMPSON, H. LINDSAY, M.D., (Univ. of Georgia)
Fourth Year Resident

SPILLERT, LEONARD J., M.D., (Univ. of Louvain)
Third Year Resident

TRIANA, SANTIAGO H., M.D., (Univ. Natl., Colum.)
Second Year Resident

WHANG, JAI CHURL, M.D., (U. of Seoul, Korea)
Second Year Resident

WHELCHEL, CARL D., M.D., (Univ. of Georgia)
Fourth Year Resident

ZARAWANI, ABDUL RAHIM, M.D., (U. of Pahlavi)
Second Year Resident

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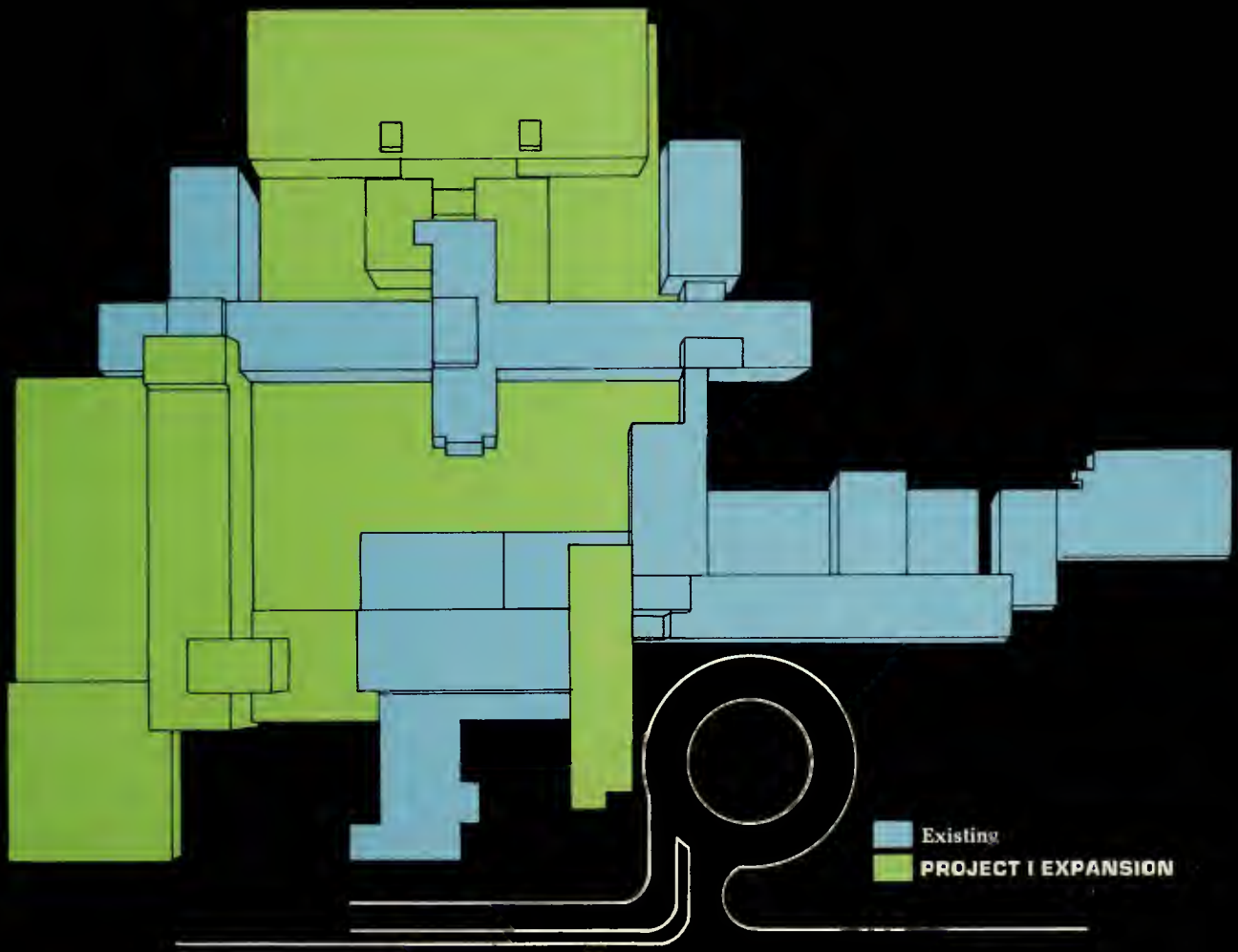

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